

DOCUMENT DATA FORM

Your Name: Nick Carino

Document Title or Description (max. 254 characters): Circle: Same as cover (or fill in below)

Drawing Book 8, Chapter 7: PATH area, Elev 264  
Sections

Include work order no. and floor no. if applicable

Roll # DB03

Doc. ID (report #, dwg. #):

Document Date: 11-69-70

Document Author Name:

Author Organization:

SHC&R

KEYWORDS - HIGHLIGHT ALL THAT APPLY

Level 1	Bankers Trust	Project 4	WTC 1 - North Tower	Add
	Below Grade	Project 5	WTC 2 - South Tower	
	Concourse	Project 6	WTC 3 - Marriot Hotel	
	Electrical Substation	Project 7	WTC 4 - South Plaza Bldg.	
	Liberty Plaza	Project 8	WTC 5 - North Plaza Bldg	
	PATH Station	WFC 1 - Oppenhiemer Dow	WTC 6 - Customs House	
	PATH Terminal	WFC 2 - Tower B	WTC 7	
	Project 1	WFC 3 - American Express	WTC Complex	
	Project 2	WFC 4 - Tower D	WTC Plaza	
	Project 3			

Level 2	Accident analysis & risk	Fire protection	Misc. Performance Problems	Structural
	Architectural	Fire service	News coverage	Tenant alterations
	Data request	Landscaping	Police	Tenant Space
	Emergency management	Management	Security	Add
	Evacuation	Mech./elec.		

Level 3	1993 explosion	Cranes	Frame	Roof	Weight
	A/E fitout	Criteria	Frame analysis	Safety	Weld detail
	A-242	Dampers	Frequency	Schedule	Weld size
	A-36	Debris	Fuel	Sculpture	Welding
	A-497	Deck	Furniture layout	Security system	Wind
	Aircraft impact	Deflection	Generators	Shear knuckle	Windows
	Air cooled condensers	Demolition	Guidelines	Shear test	Yield strength
	Analysis	Design	Gypsum board	Shear Stud	Add
	Angles	Detailing	Hat truss	Shop drawings	Drawing books
	Antenna	Doors	Human comfort	Shortening	
	Artifacts	Drawings	HVAC	Slab	
	Asbestos	Eastern States Steel	Index	Sturdy wall	
	Base plate	Egress	Inspection	Smoke control	
	Beams	Elevator	Insulation	Smoke test	
	Bid documents	Elevator Shaft	Job number	Spandrel beam	
	Bid Invitation	Emergency communications	Joist	Specifications	
	Bow tie	Equipment	L-50	Splices	
	Bracing	Erection marks	Lighting	Sprinkler	
	Bridging truss	Errors & Omissions	Loads	Stability	
	Building code	Escalator	Maintenance	Stairways	
	Calculations	Expansion joint	Marking	Standards	
	Carpet	Exterior columns	Mesh reinforcement	Steel	
	Ceilings	Fabrication	Mill inspection	Steel composition	
	Certification	Family member	Model	Stiffness	
	Chillers	Field survey	Mullion	Structural review	
	Cladding	Fire alarms	Operations	Surveillance	
	Collapse	Fireproofing	Paint	Survey	
	Columns	Fire spread	Partition layout	Survivor	
	Communication systems	Fire testing	Partitions	Tenant list	
	Composite truss	Fire tower	Photos	Tenant occupancy	
	Computer output	Flag Pole	Pipes	Testing	
	Computer program	Flammability	Plumbing	Tie	
	Concrete	Floor	Prestressing	Tolerances	
	Connections	Floor load	Probability, uncertainty	Transfer Girders	
	Construction	Floor slab	Quality control	Triad	
	Contract	Floor system	Ramp	Truss	
	Core beams	Floor trusses	Reinforcing (strengthening)	Vestibule	
	Core columns	Formwork	Renovation	Vibration	
	Corrosion	Foundations	Repair	Walls	
	Cracking	Fracture	Research & Development	Water supply	
				Weather	

WTCI-1065-LERA

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE CONCRETE WALL DETAILS, PATH AREA &amp; EL.264 - INDEX

DATE 9/ 1/70

## REVISIONS

8-JK7-	1.1	INDEX
8-JK7-	1.2	INDEX
8-JK7-	2	NOT USED
8-JK7-	3.1	BUFFER WALLS
8-JK7-	3.2	BUFFER WALLS
8-JK7-	3.3	BUFFER WALLS
8-JK7-	3.4	BUFFER WALLS
8-JK7-	3.5	BUFFER WALLS
8-JK7-	3.6	BUFFER WALLS
8-JK7-	3.7	BUFFER WALLS
8-JK7-	3.8	BUFFER WALLS
8-JK7-	3.9	BUFFER WALLS
8-JK7-	3.10	BUFFER WALLS
8-JK7-	3.11	BUFFER WALLS
8-JK7-	3.12	BUFFER WALLS
8-JK7-	4.1	PATH PLATFORMS
8-JK7-	4.2	PATH PLATFORMS
8-JK7-	4.3	PATH PLATFORMS
8-JK7-	4.4	PATH PLATFORMS
8-JK7-	5.1	PATH SECTIONS
8-JK7-	5.2	PATH SECTIONS
8-JK7-	5.3	PATH SECTIONS
8-JK7-	5.4	PATH SECTIONS
8-JK7-	5.5	PATH SECTIONS
8-JK7-	5.6	PATH SECTIONS
8-JK7-	5.7	PATH SECTIONS
8-JK7-	5.8	PATH SECTIONS
8-JK7-	5.9	PATH SECTIONS
8-JK7-	5.10	PATH SECTIONS
8-JK7-	5.11	PATH SECTIONS
8-JK7-	5.12	PATH SECTIONS
8-JK7-	5.13	PATH SECTIONS
8-JK7-	5.14	PATH SECTIONS
8-JK7-	5.15	PATH SECTIONS
8-JK7-	5.16	PATH SECTIONS
8-JK7-	5.17	PATH SECTIONS
8-JK7-	5.18	PATH SECTIONS
8-JK7-	5.19	PATH SECTIONS
8-JK7-	6.1	VOID
8-JK7-	6.2	VOID
8-JK7-	6.3	PATH SECTIONS
8-JK7-	6.4	NOT USED
8-JK7-	6.5	PATH SECTIONS
8-JK7-	6.6	NOT USED
8-JK7-	6.7	NOT USED
8-JK7-	6.8	NOT USED

8-JK7- 1.1



## Structural & Civil Engineers

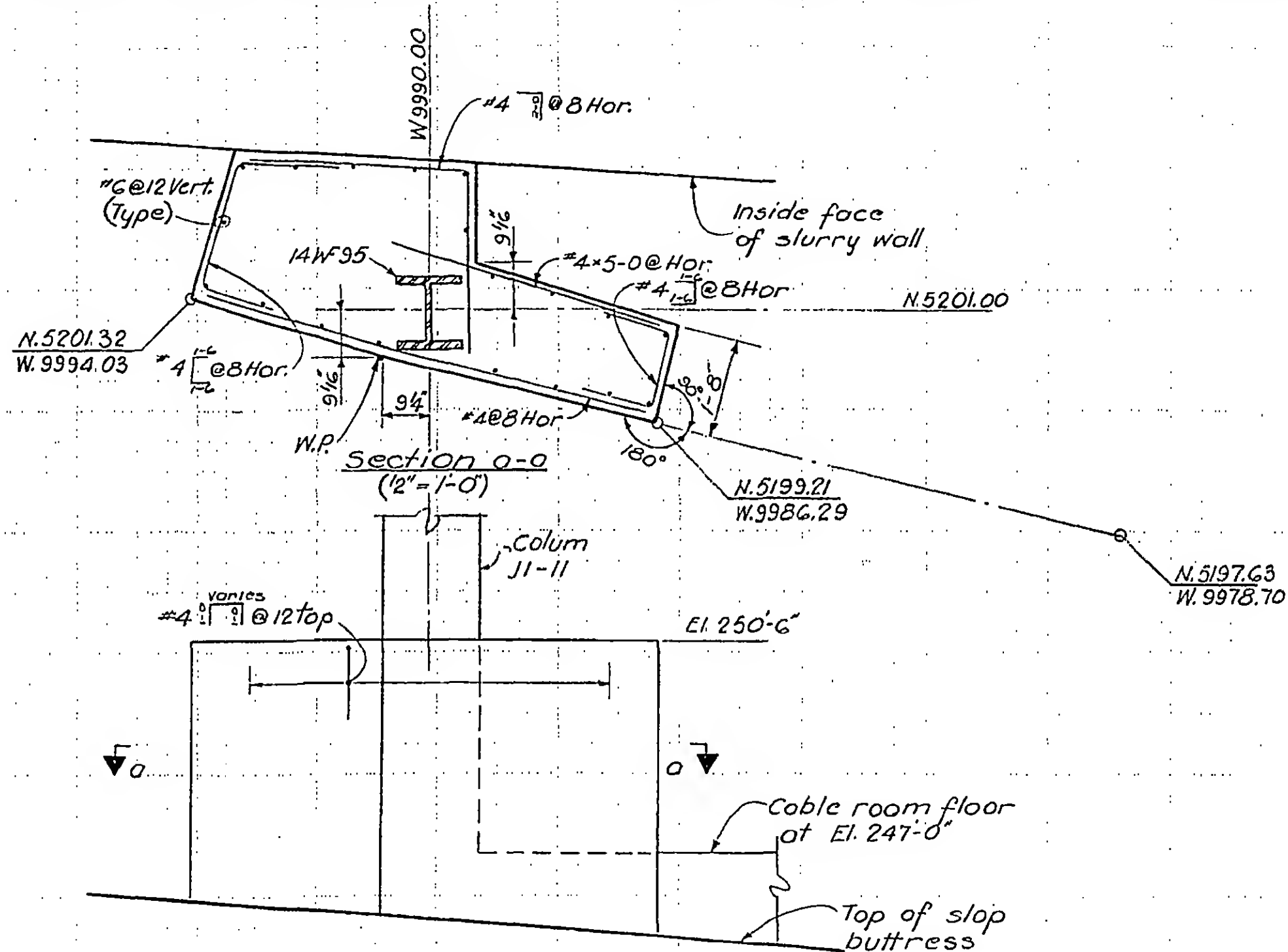
TITLE
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## BUFFER WALL DETAILS

DATE	5-1-68
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7-9-68

10-24-69 GEN. REV.



ELEVATION  
(2 = 1'-0")



DRAWN  
D.C. Huggins

..E.L.

8-JK7-3.1

## Structural & Civil Engineers

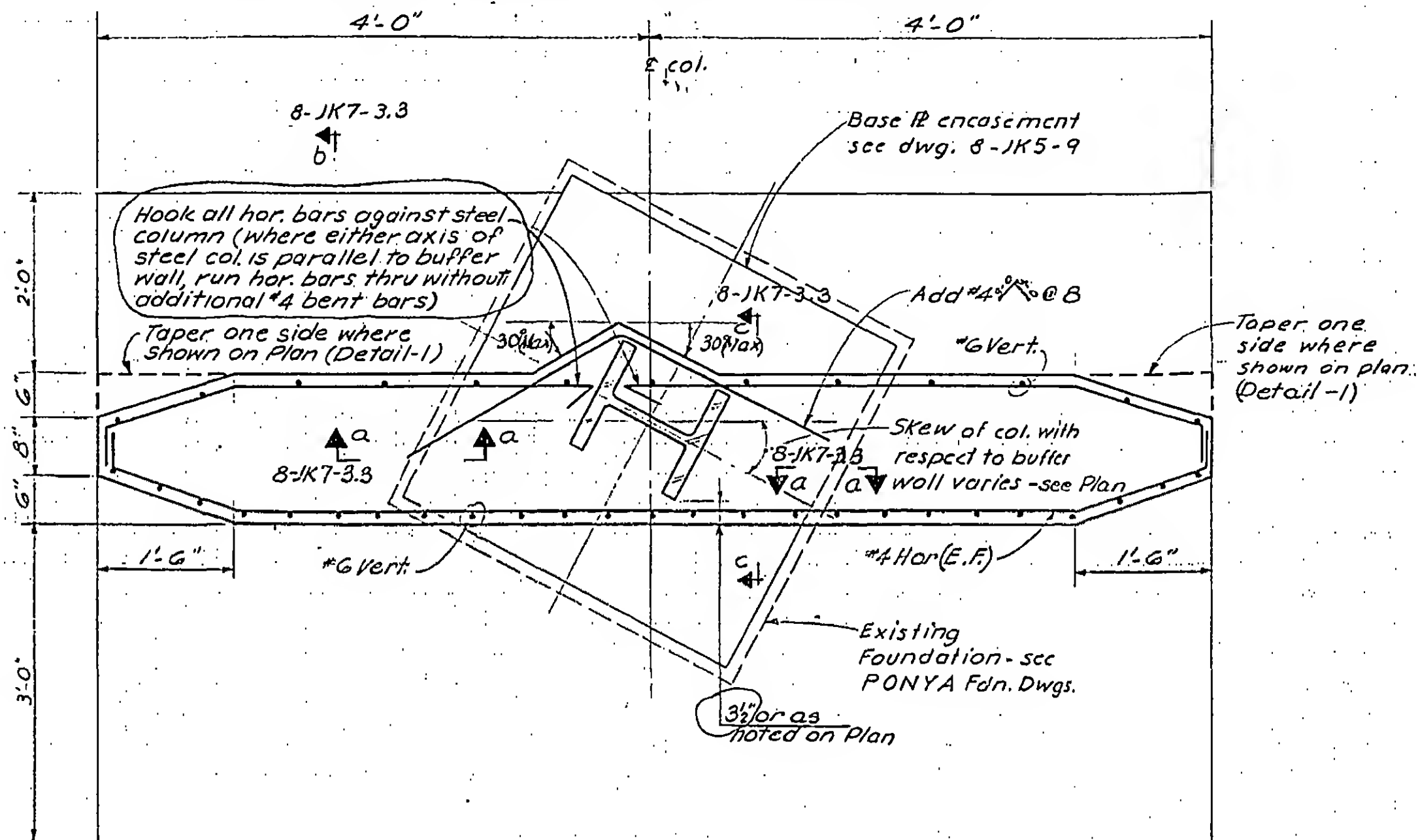
DATE 5-7-68

## REVISIONS

7-9-68

11-7-69 GEN.  
REV.

12-12-69



b  
4

Detail-1  
Detail-2  
Plan

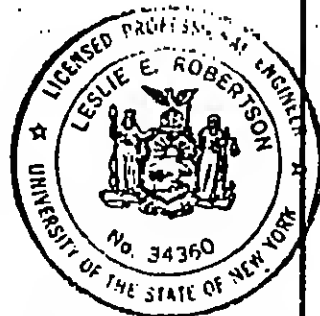
Notes:

1. All concrete to be  $f'c = 3000 \text{ psi}$

DRAWN  
S.C.

REVIEWED  
E.L.

8-JK7-3.2

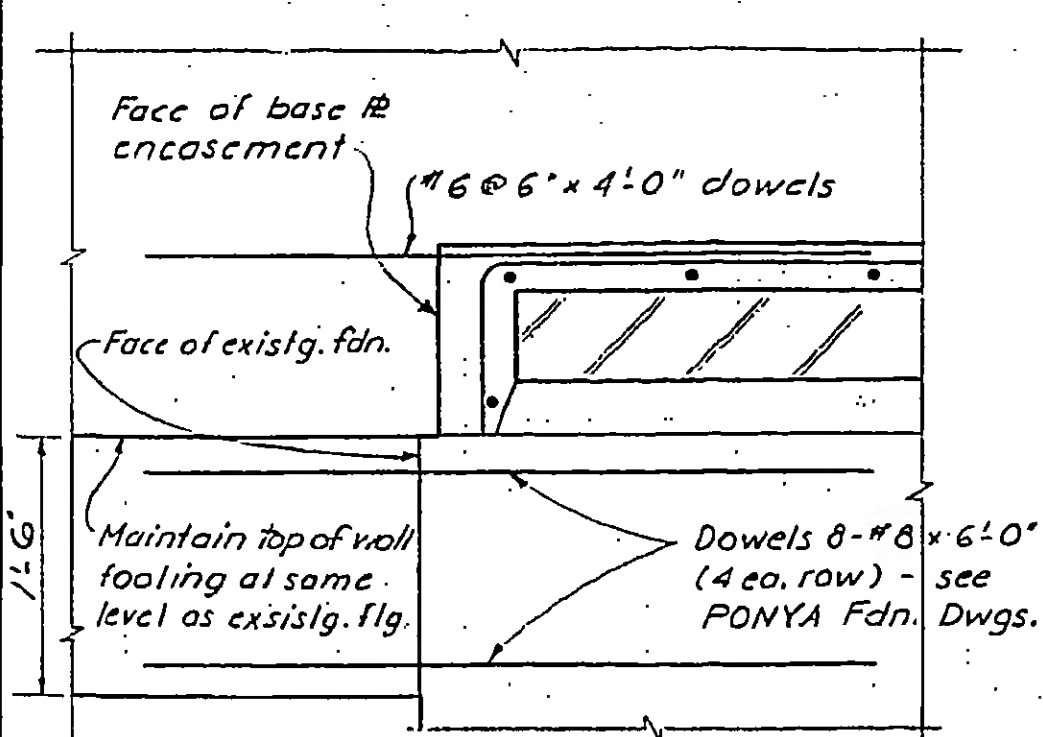


SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

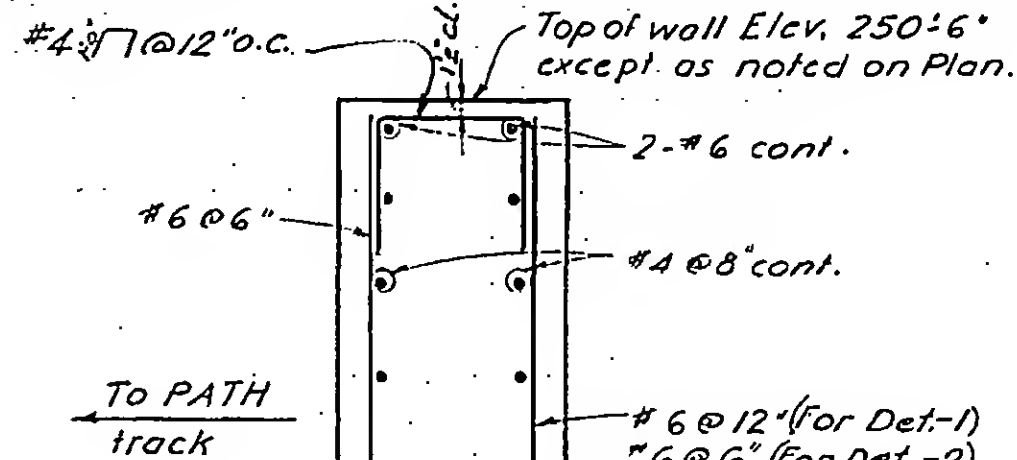
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER TITLE BUFFER WALL DETAILSDATE 11-7-69

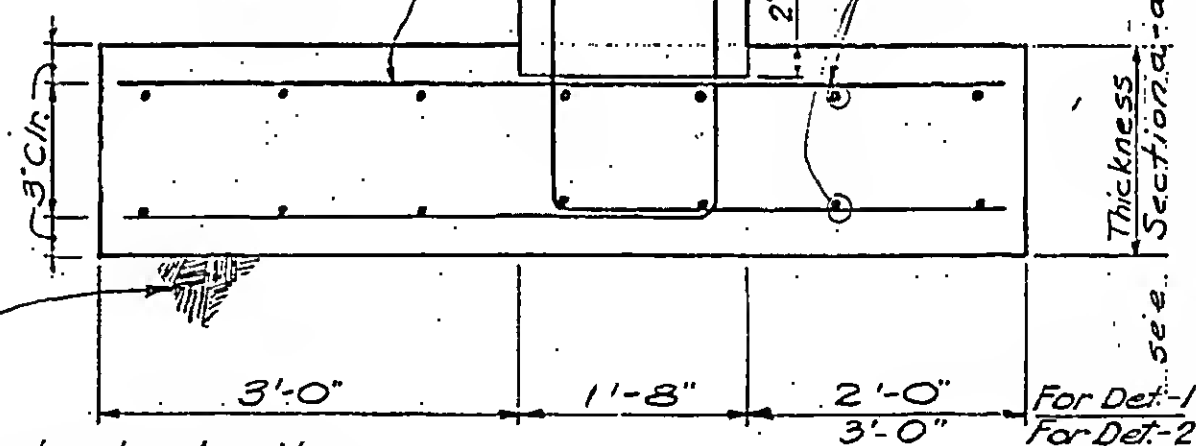
## REVISIONS



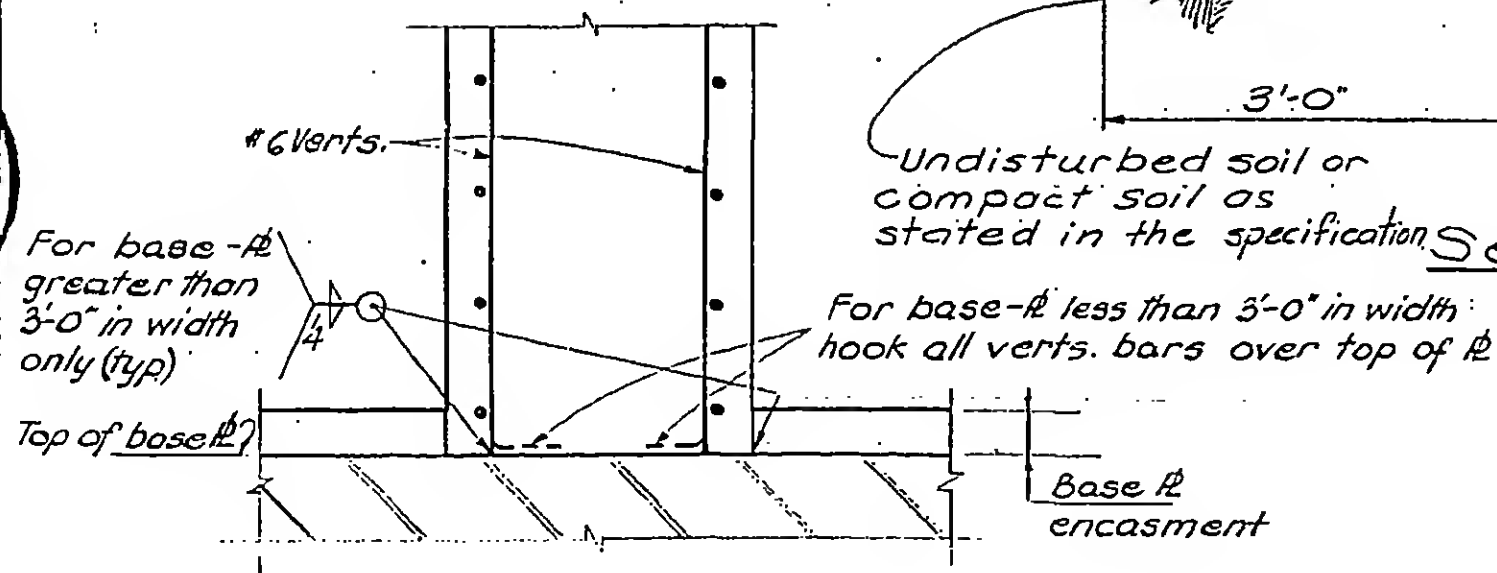
Section a-a



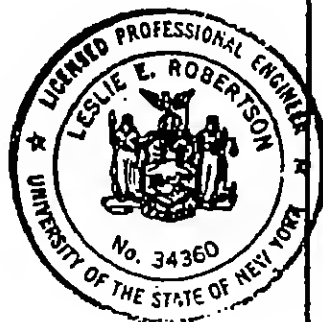
#6 @ 6" Top



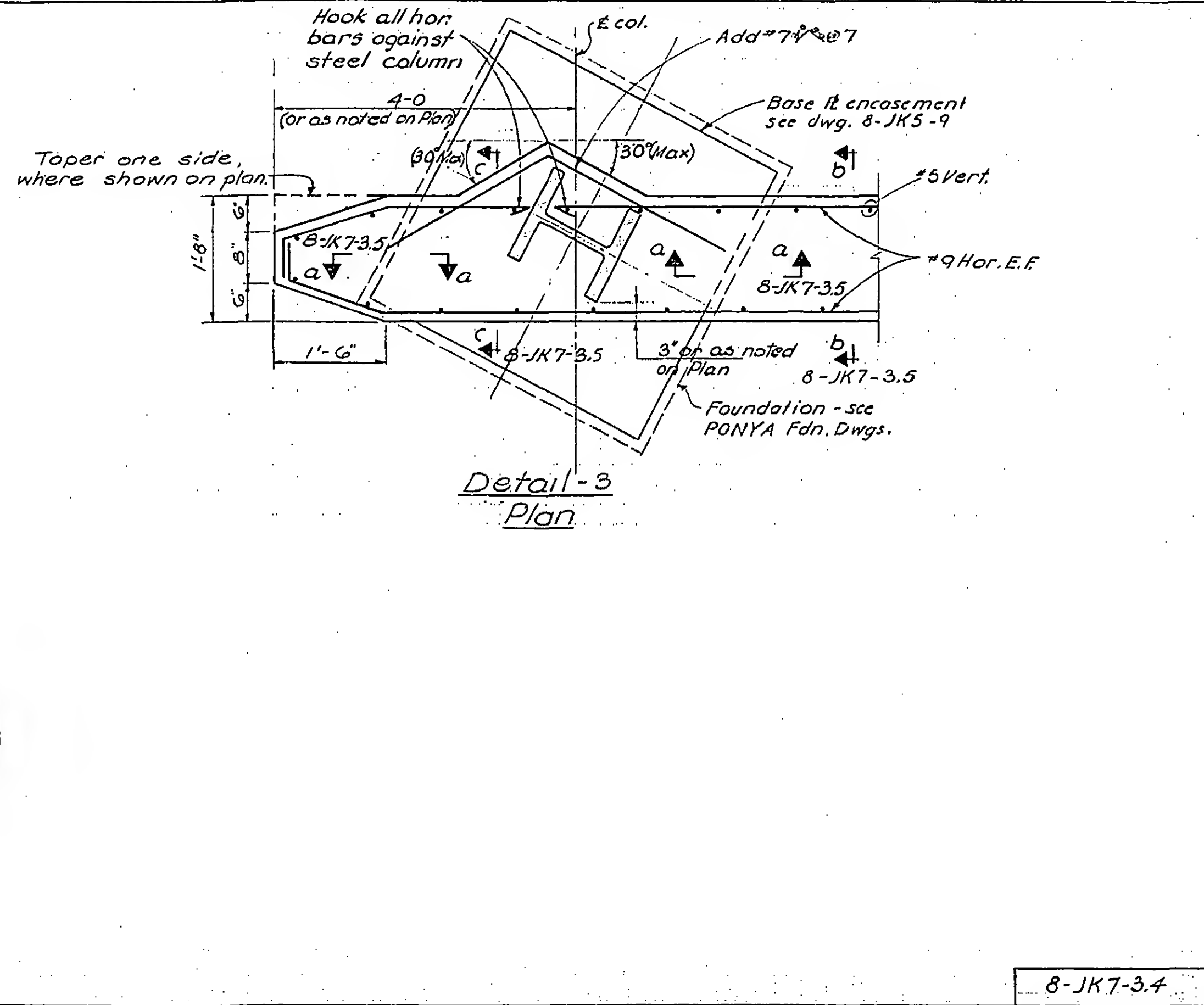
Section b-b



Section c-c

DRAWN  
S.C.REVIEWED  
E.L.

8-JK7-3.3



DRAWN S.C.
REVIEWED E.L.

8-JK7-3.4

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

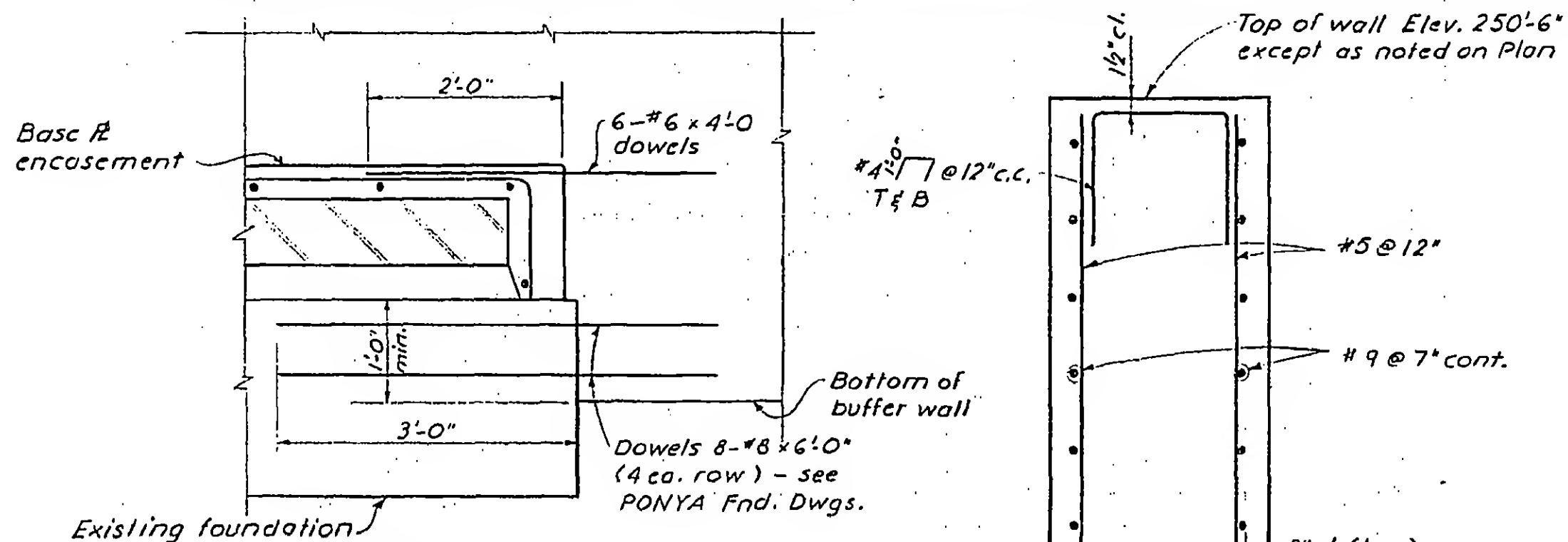
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

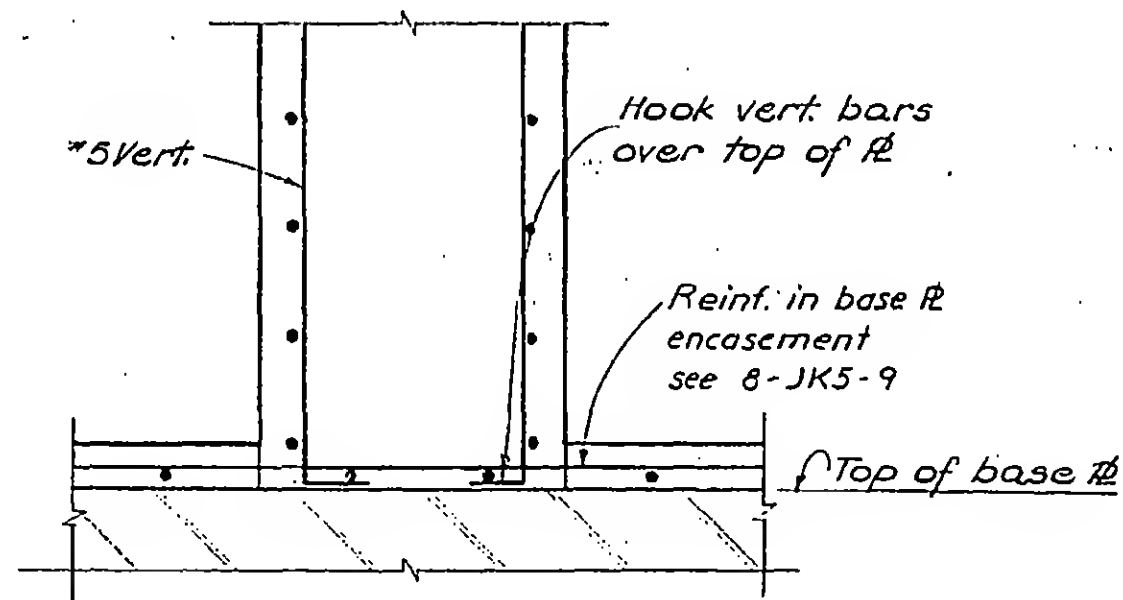
TITLE BUFFER WALL DETAIL

DATE 11-7-69

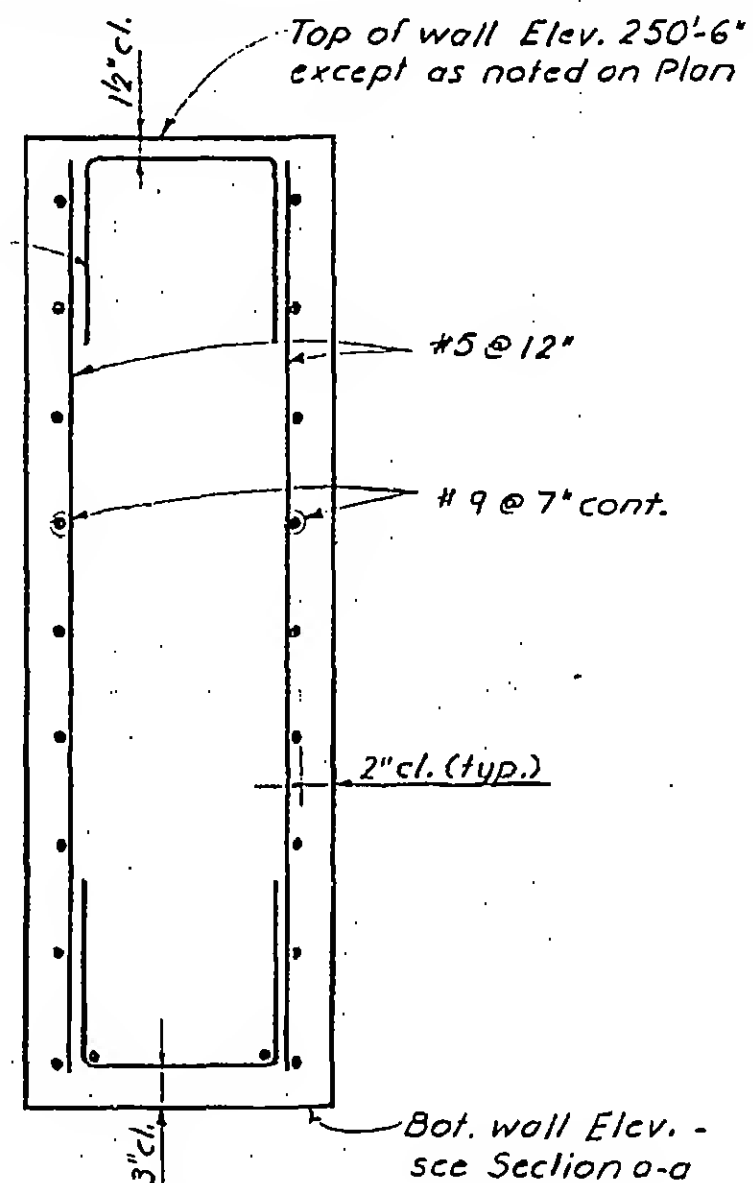
REVISIONS



Section a-a



Section c-c



Section b-b

DRAWN  
S.C.REVIEWED  
E.L.

8-JK7-3.5



SKILLING, HELLE. CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

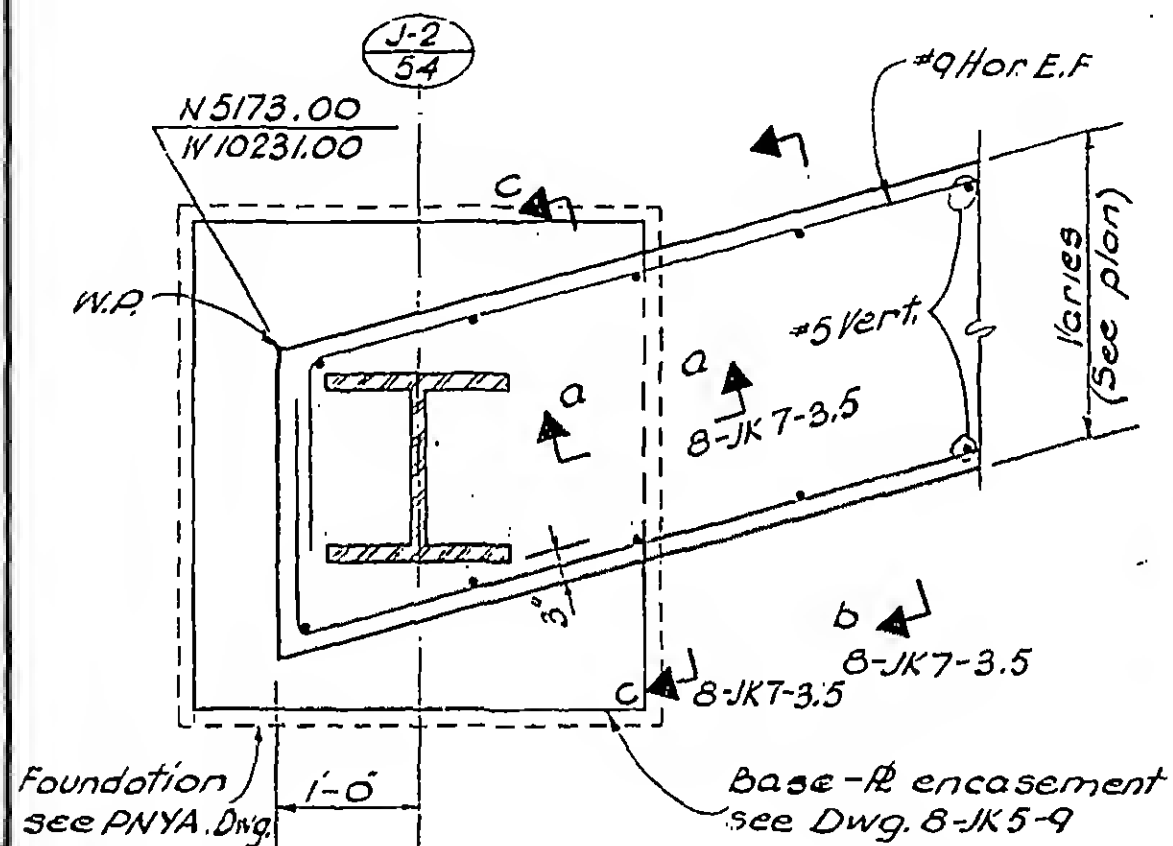
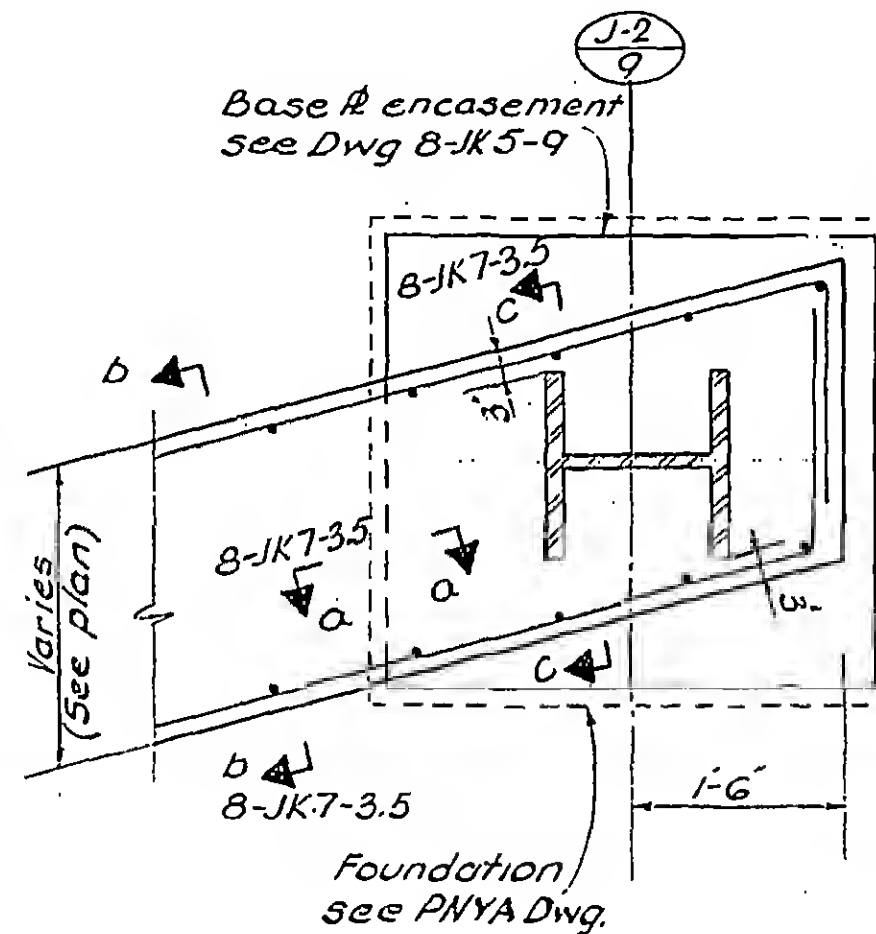
PROJECT THE WORLD TRADE CENTER

TITLE

BUFFER WALLS DETAILS

DATE 11-7-69

REVISIONS

Detail-4Detail-5

DESIGNED

DRAWN

D. Huggins

REVIEWED

E.L.

8-JK7-3.6

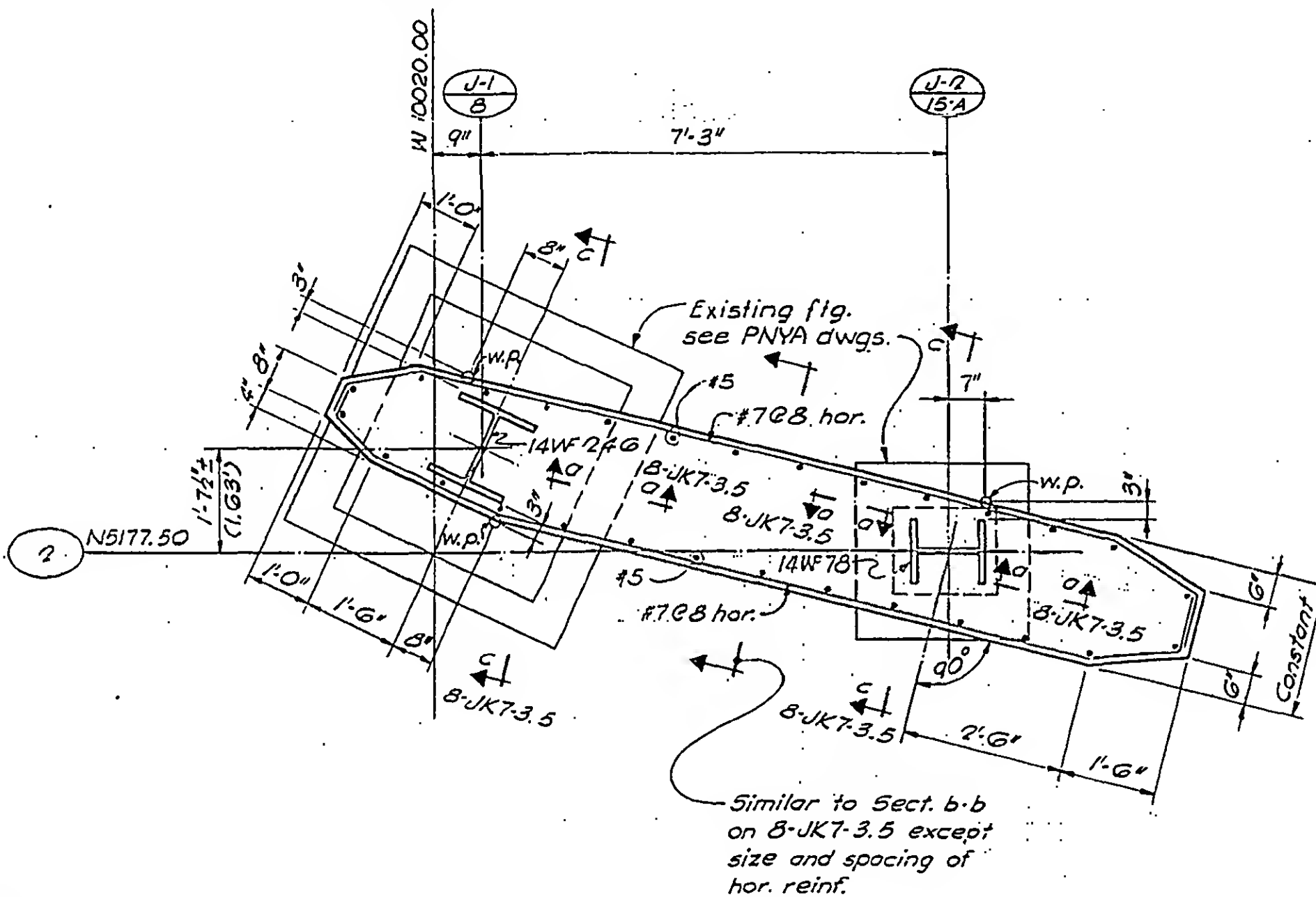
## Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE	BUFFER WALL DETAILS
-------	---------------------

DATE 12-10-69

## REVISIONS



DETAIL G  
( $\frac{1}{2}'' = 1'-0''$ )



**DESIGNED**

DRAWN  
G. K.

REVIEWED  
E.L.:

8-JK7-3.7

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

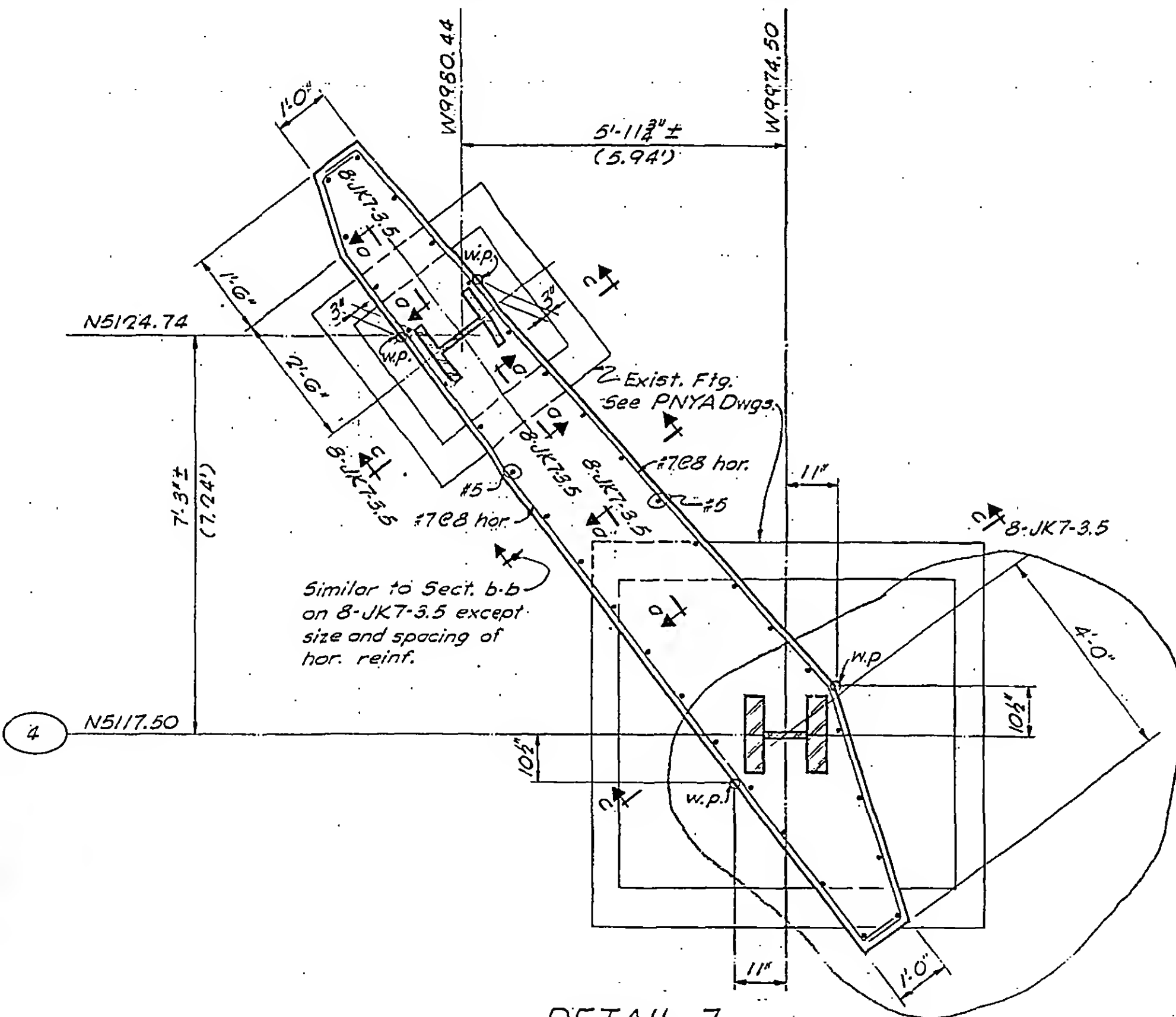
PROJECT THE WORLD TRADE CENTER

TITLE BUFFER WALL DETAILS

DATE 12-10-69

REVISIONS

1-8-70



DESIGNED

DRAWN  
G.K.REVIEWED  
E.L.

DETAIL 7

(1/2" = 1'-0")

8-JK7-3.8

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

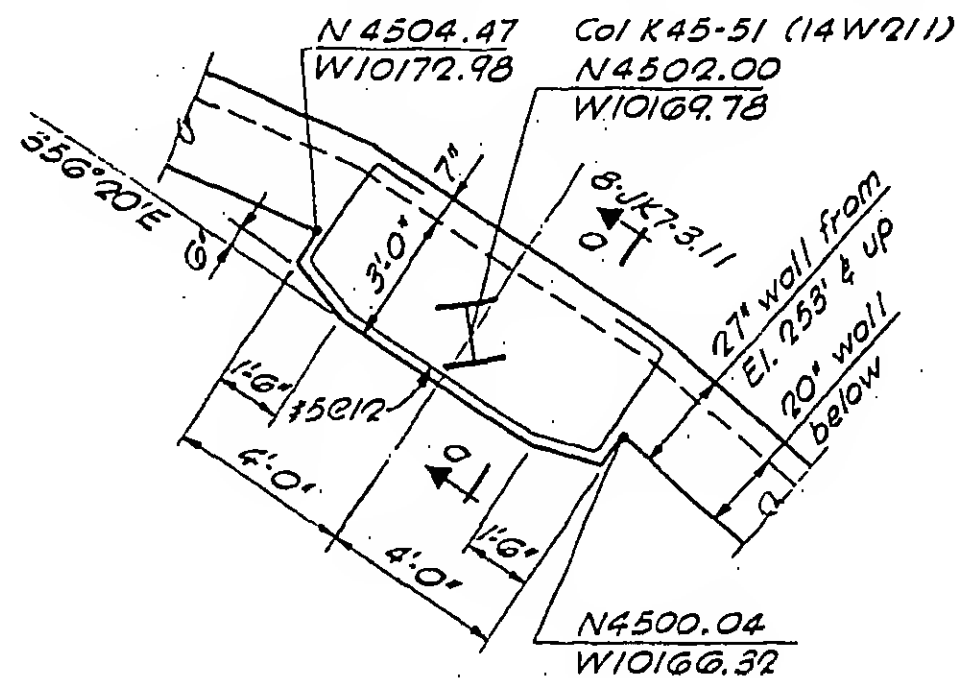
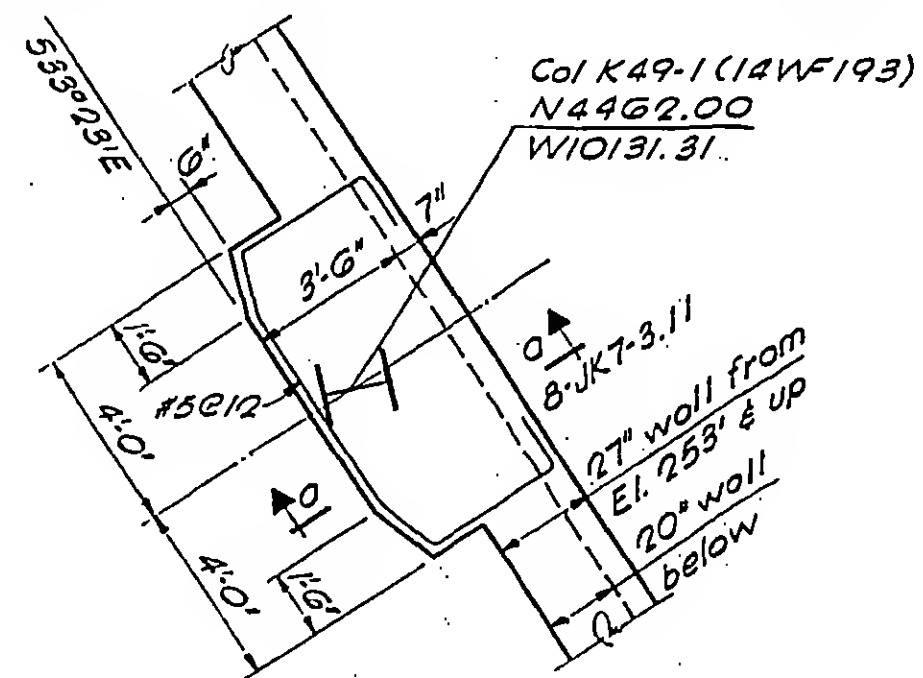
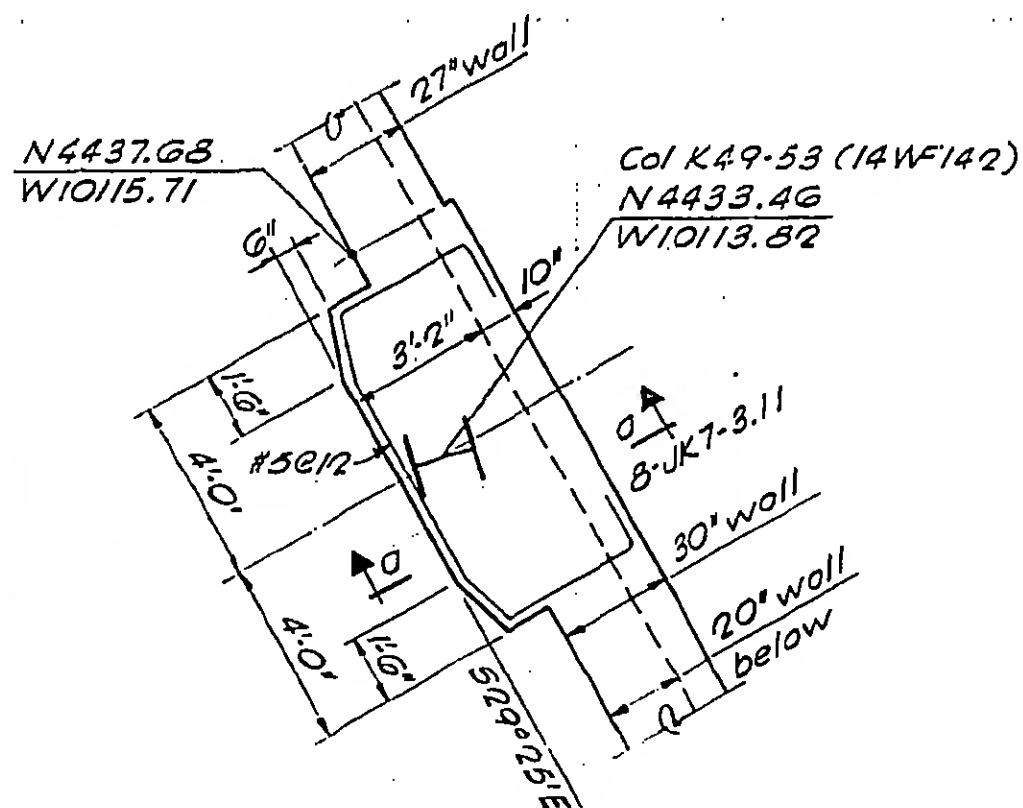
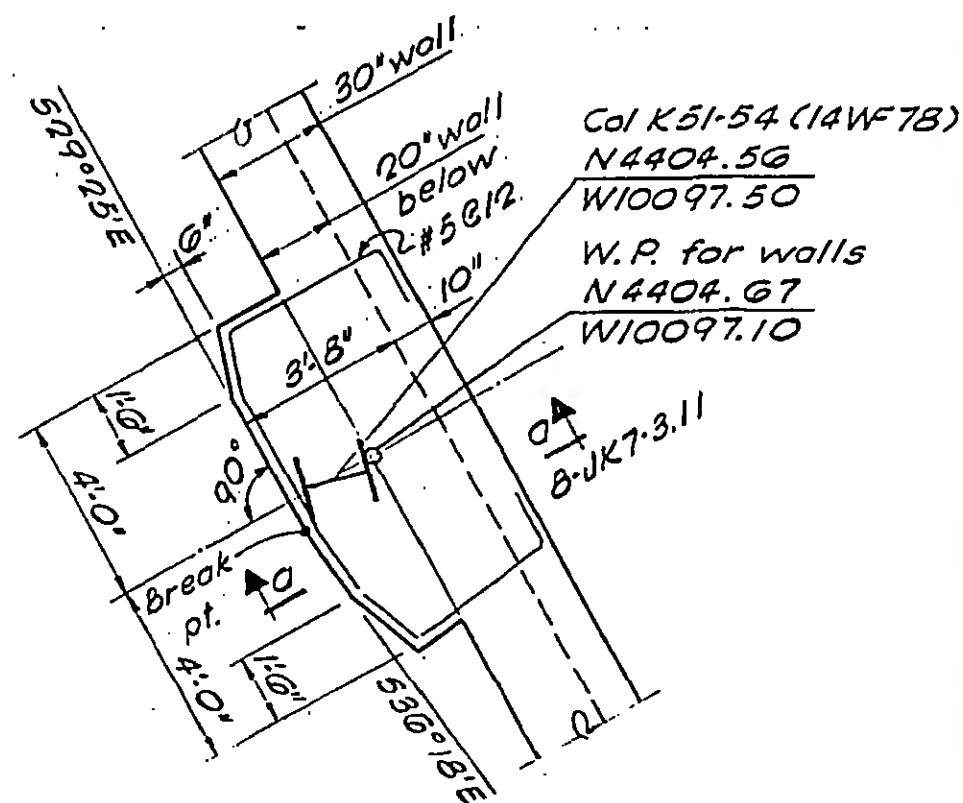
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE BUFFER WALL DETAILS

DATE 1-30-70

REVISIONS

DETAIL 8DETAIL 9DETAIL 10DETAIL 11

(1/4" = 1'-0")

8-JK7-3.9



DESIGNED

DRAWN  
G.K.REVIEWED  
E.L.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

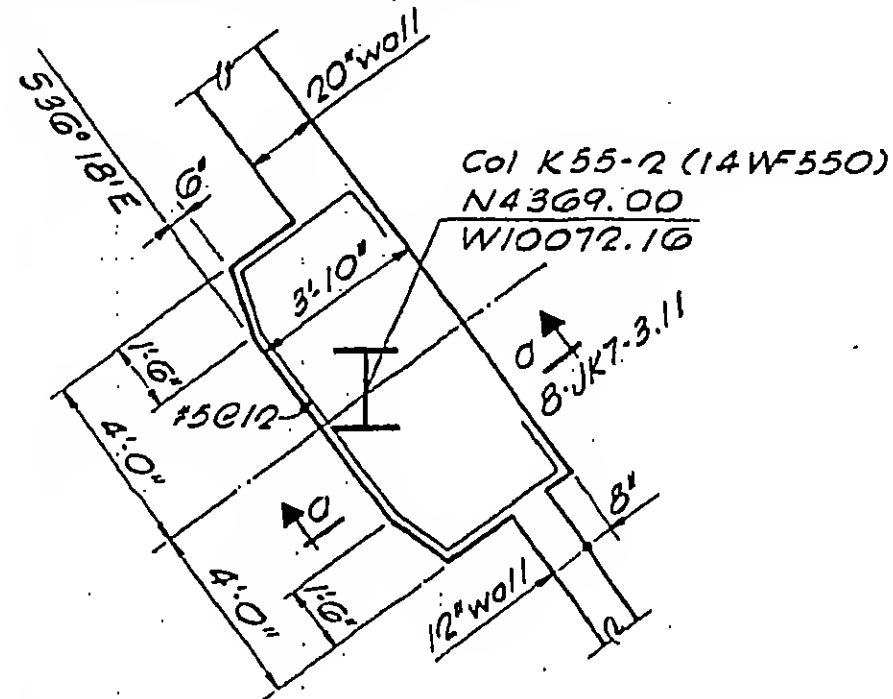
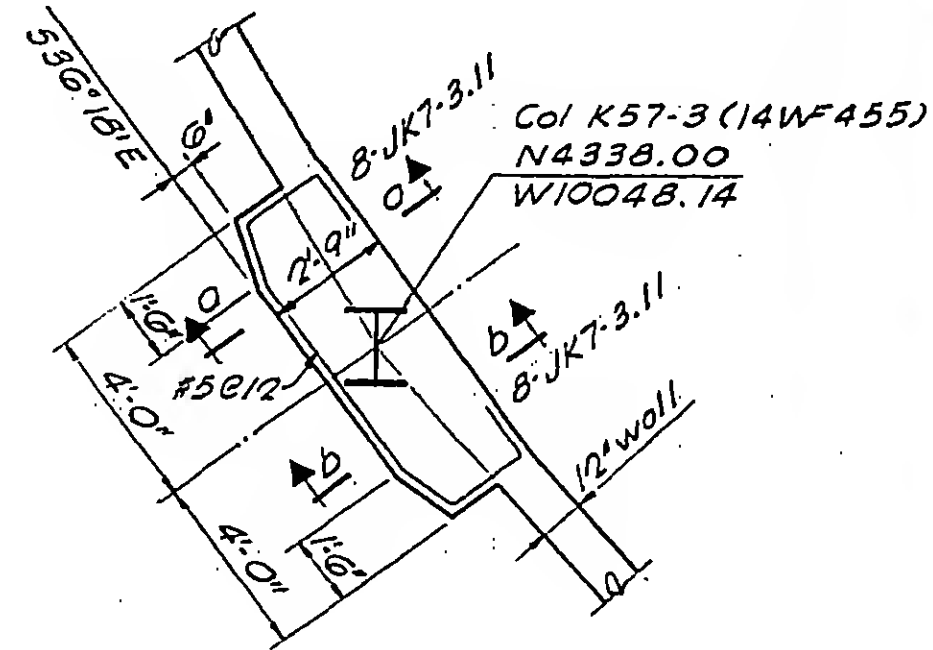
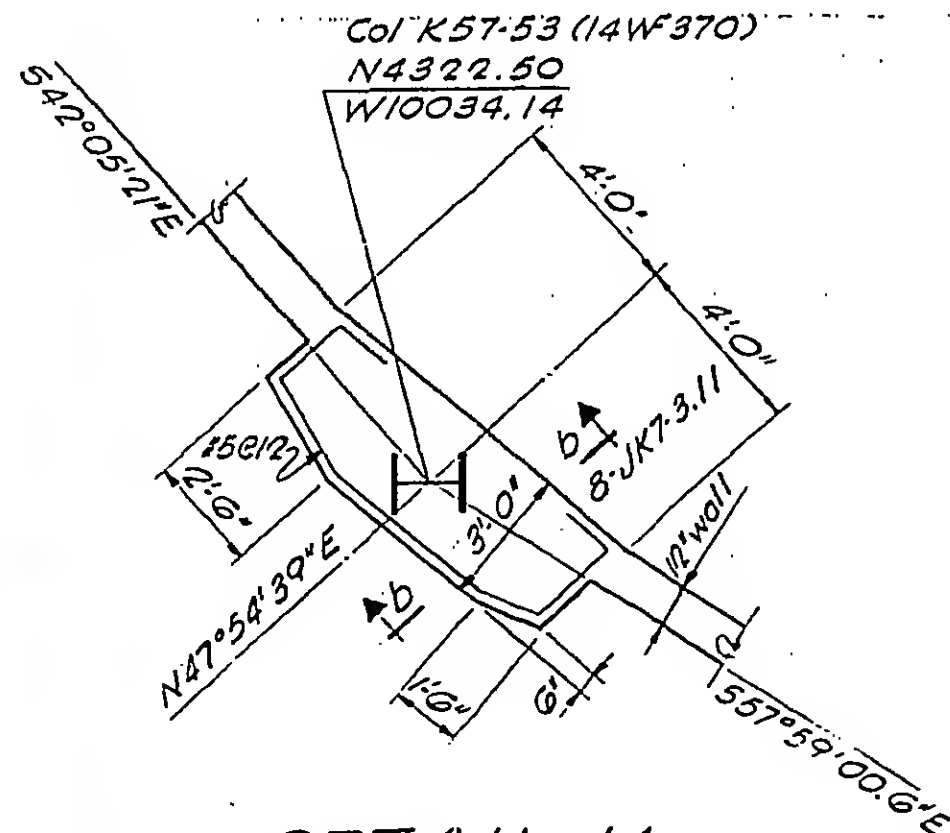
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE BUFFER WALL DETAILS

DATE 1-30-70

REVISIONS

DETAIL 12DETAIL 13DETAIL 14

DESIGNED

DRAWN

G.K.

REVIEWED

E.L.

(1/4" = 1'-0")

8-JK7-3.10

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

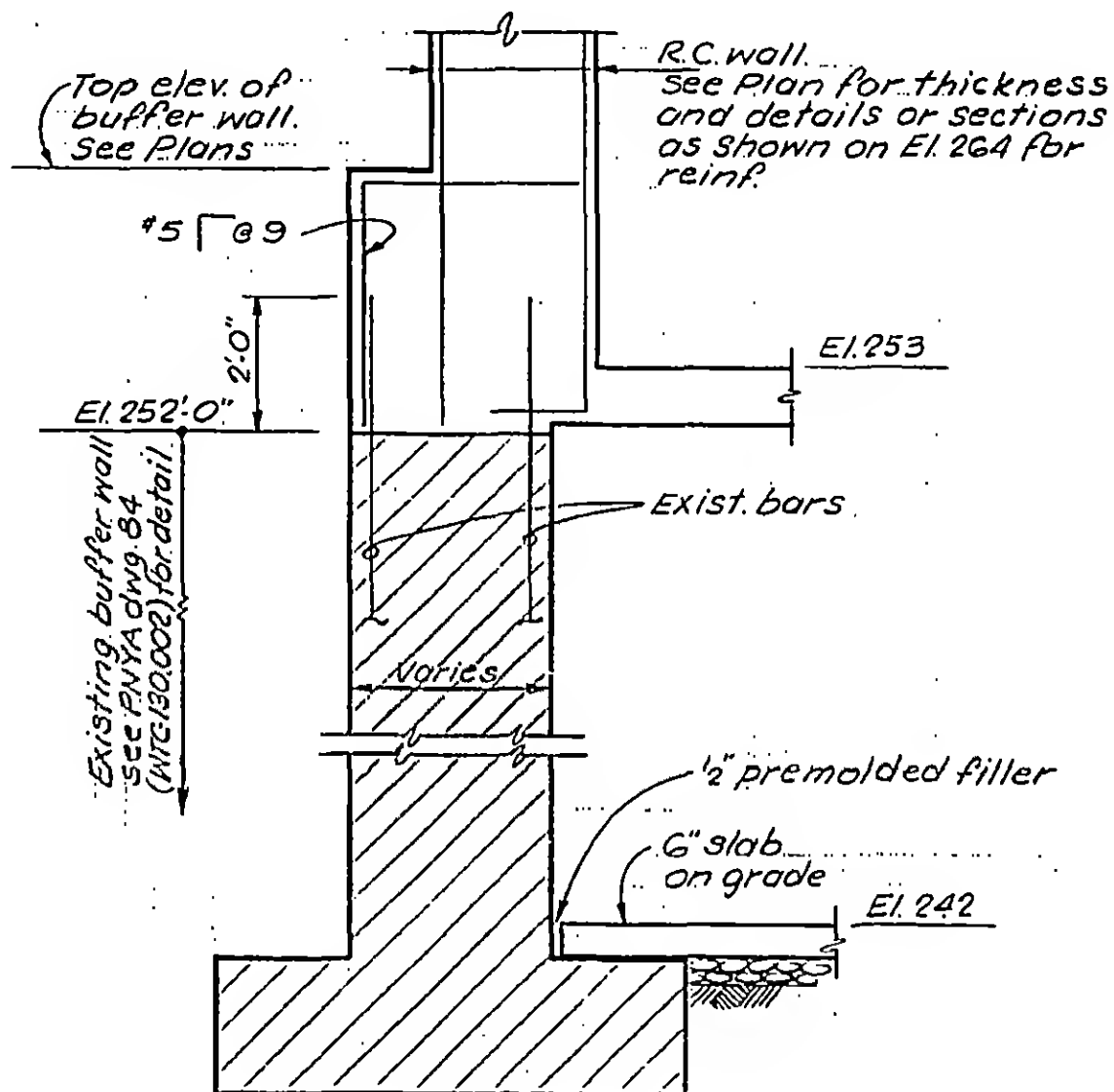
PROJECT THE WORLD TRADE CENTER

TITLE

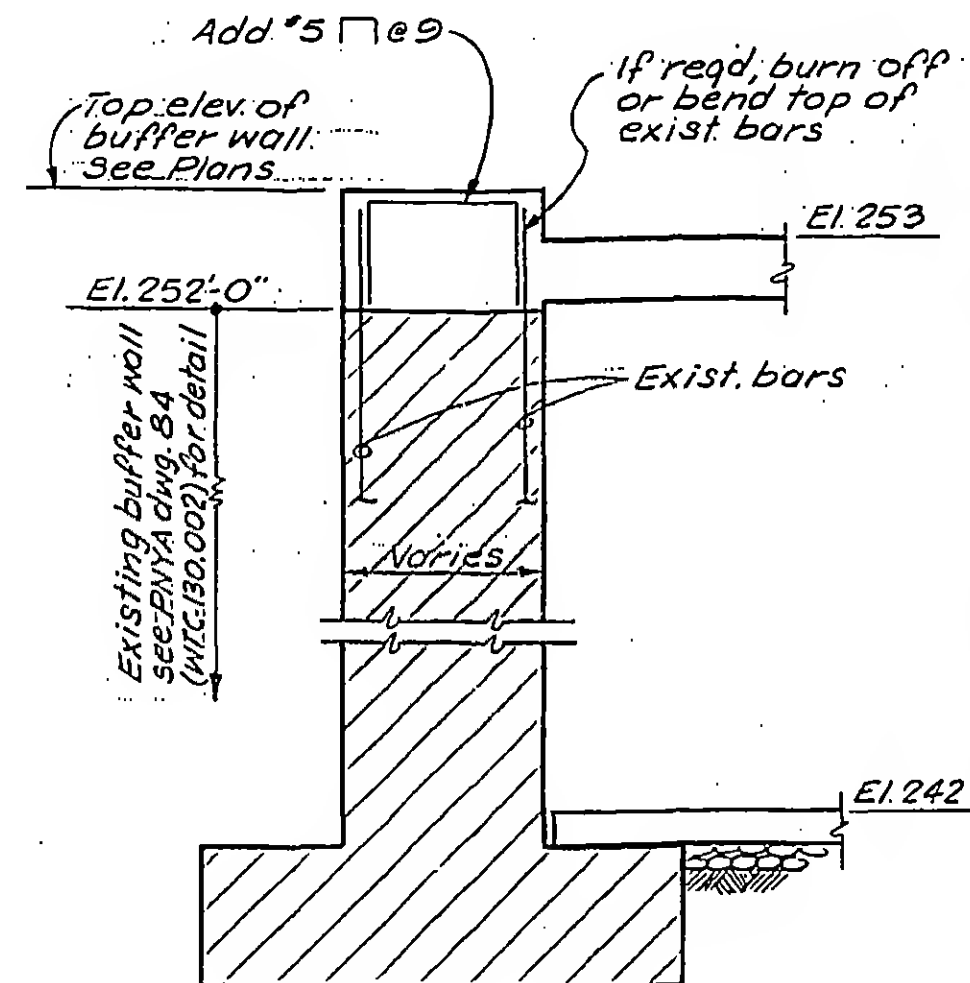
BUFFER WALL DETAILS

DATE 1-30-70

## REVISIONS



Section a-a  
(3/8" = 1'-0")



Section b-b  
(3/8" = 1'-0")



DESIGNED

DRAWN  
S.C.REVIEWED  
E.L.

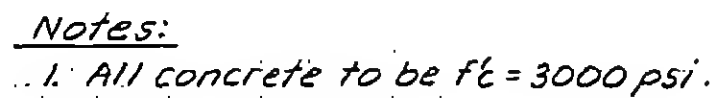
B-JK7-3.11

## Structural & Civil Engineers

TITLE BUFFER WALL DETAILS

DATE 3-25-70

## REVISIONS



DETAIL - 15  
(1/2" = 1'-0")



**DESIGNED**

DRAWN  
A.F.

REVIEWED  
E.L.

8-JK7-3.12

## Structural & Civil Engineers

TITLE PATH PLATFORM 'A'

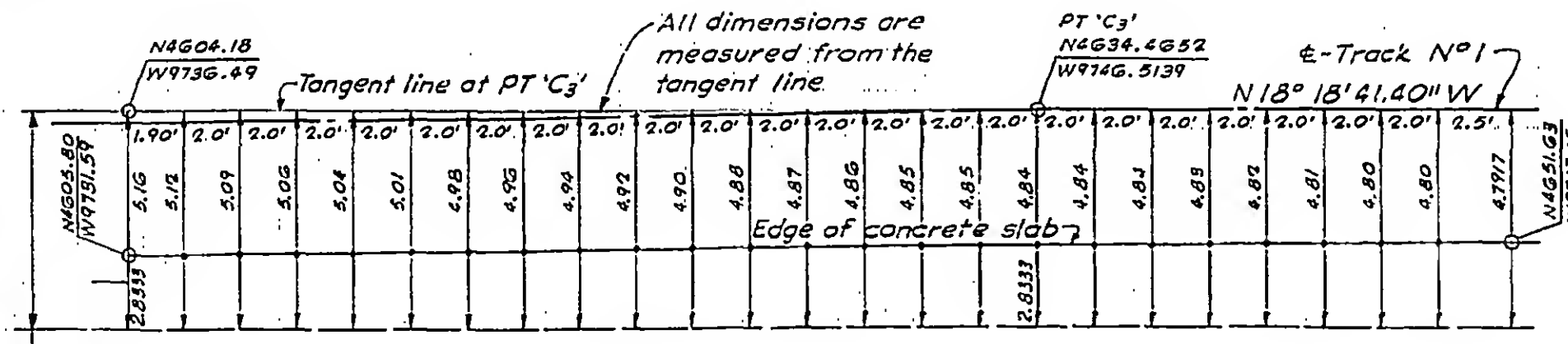
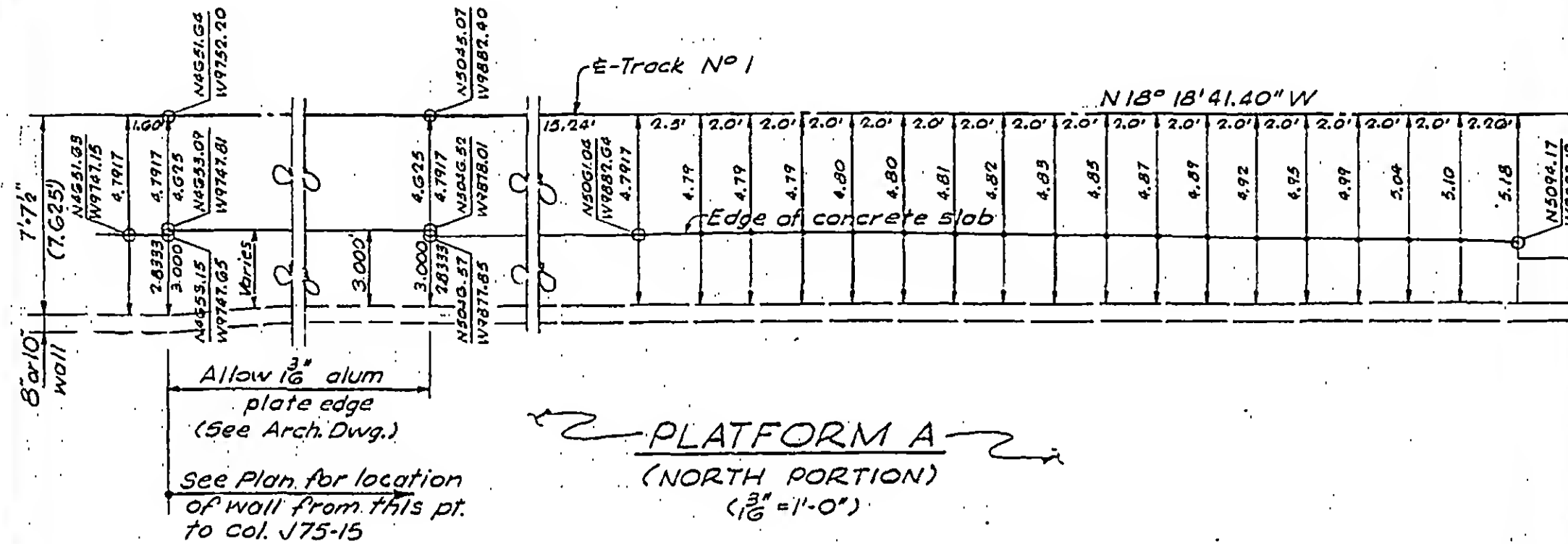
DATE 12-10-69

1-16-70

2-10-70

3-4-70

3-12-70



PLATFORM A  
(SOUTH PORTION)  
( $\frac{3}{16} = 1'-0"$ )



**DESIGNED**

DRAWN  
G. K.

REVIEWED  
E.L.

REF. DWG. HM 224-68 (3-12-69)

B-JK7-4:1



## Structural & Civil Engineers

PROJECT *THE WORLD TRADE CENTER*

TITLE	PATH PLATFORM 'B'
-------	-------------------

DATE 12-10-69

## REVISIONS



TSL  
N5078.0924  
W9948.6915

E-Trock N° 3 ✓

*N 18° 18' 41.4" W*

Edge of concrete slab

Allow  $1\frac{3}{8}$ " alum  
plate edge (See  
Arch. Dwg.)

## PLATFORM B

$$(\sqrt[3]{6} = 1.81)$$

Allow  $\frac{3}{16}$ " alum.  
plate edge (See  
Arch. Dwg.)

Edge of concrete slab

E-Trock N° 3)

N 18° 18' 41.4" W

TSK  
N5089.6950  
W9911.1278



DECEMBER

DRAWN  
G.K.

REVIEWED  
E.L.

Ref. Dwg. HM 224-68 (3-12-69)

B-JK7-4.2

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

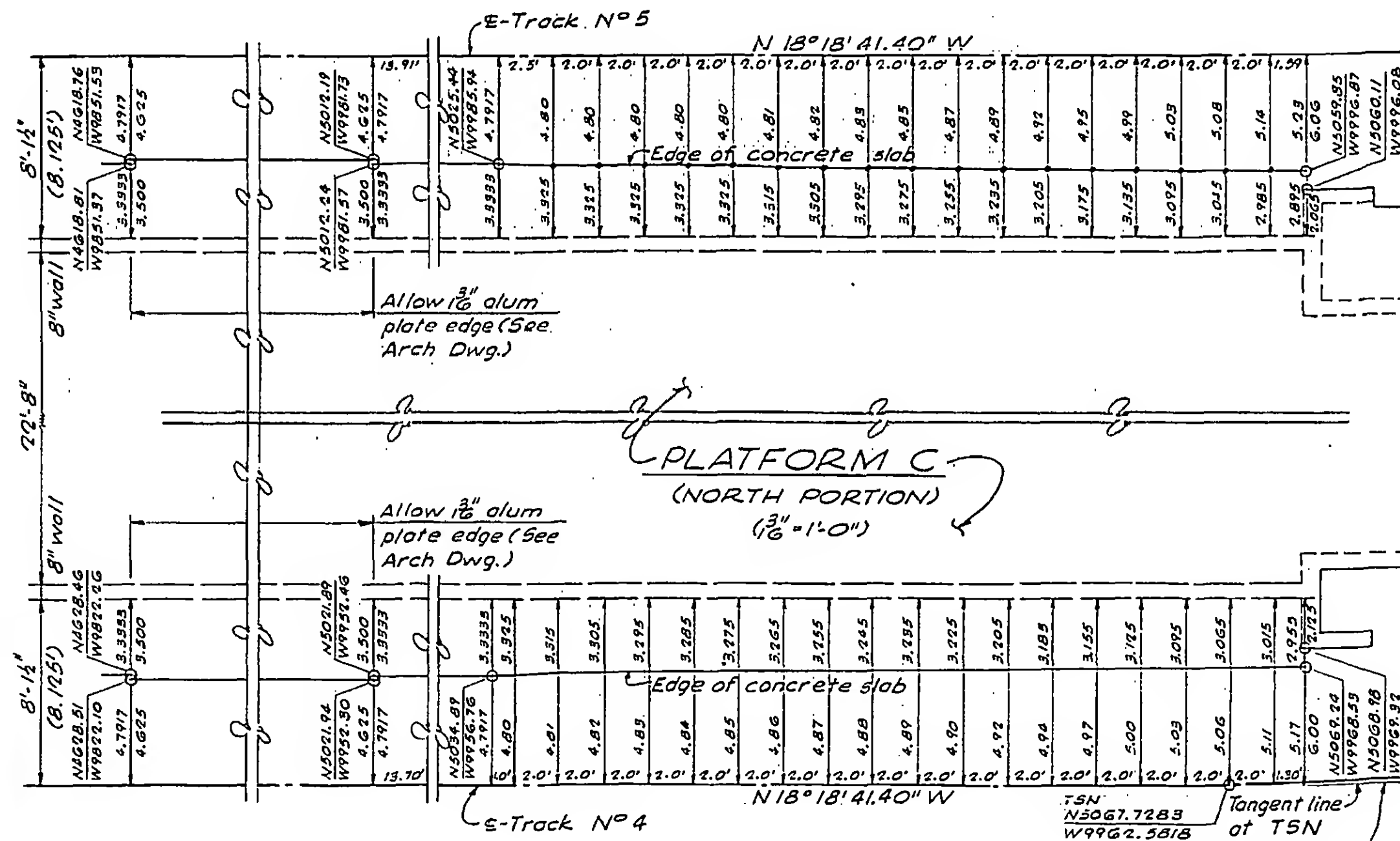
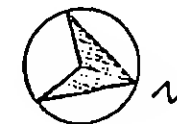
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH PLATFORM 'C' NORTH PORTION

DATE 12-10-69

REVISIONS



## Structural & Civil Engineers

TITLE PATH PLATFORM 'C' SOUTH PORTION

DATE 12-10-69

## REVISIONS

All dimensions are measured from the tangent line of 'STQ'

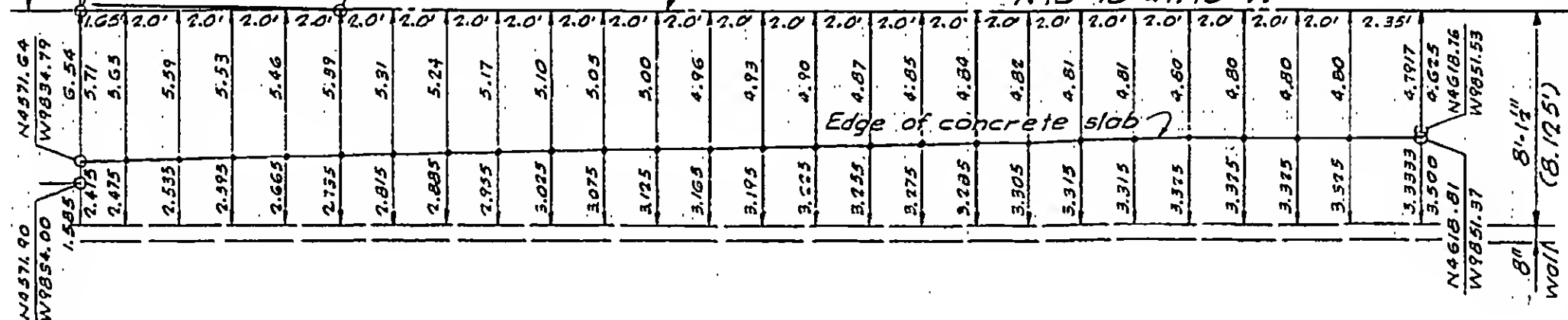
—This pt. falls on  
extended tangent line

$$\begin{array}{r} N4569.85 \\ \hline W9840.21 \end{array}$$

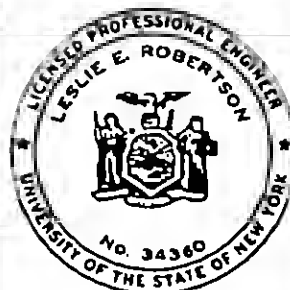
57Q  
N4579.0107  
W9843.2418

- E-Track Nº5

$N 18^{\circ} 18' 41.40'' W$



PLATFORM C  
(SOUTH PORTION)  
( $\frac{3}{16}$ " = 1'-0")



**DESIGNED**

**DRAWN**

G.K

## REVIEWED

E.L.

Ref. Dwg. HM 224-68 (3-12-69)

8-JK7-4.4

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

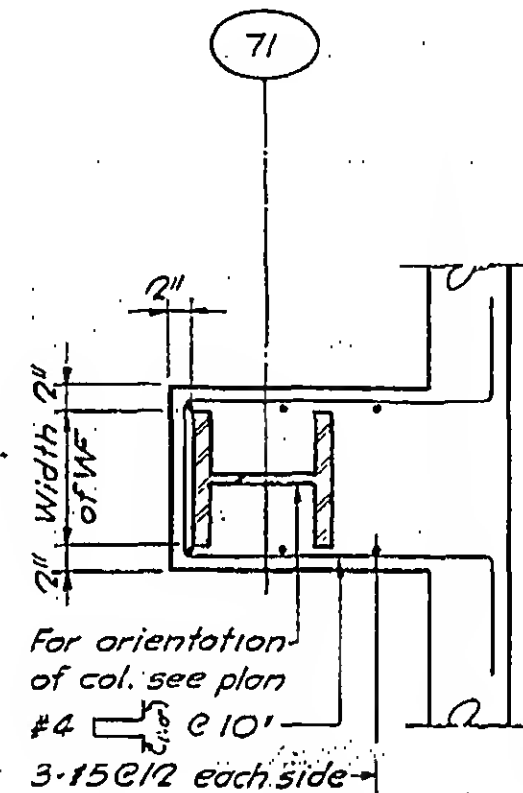
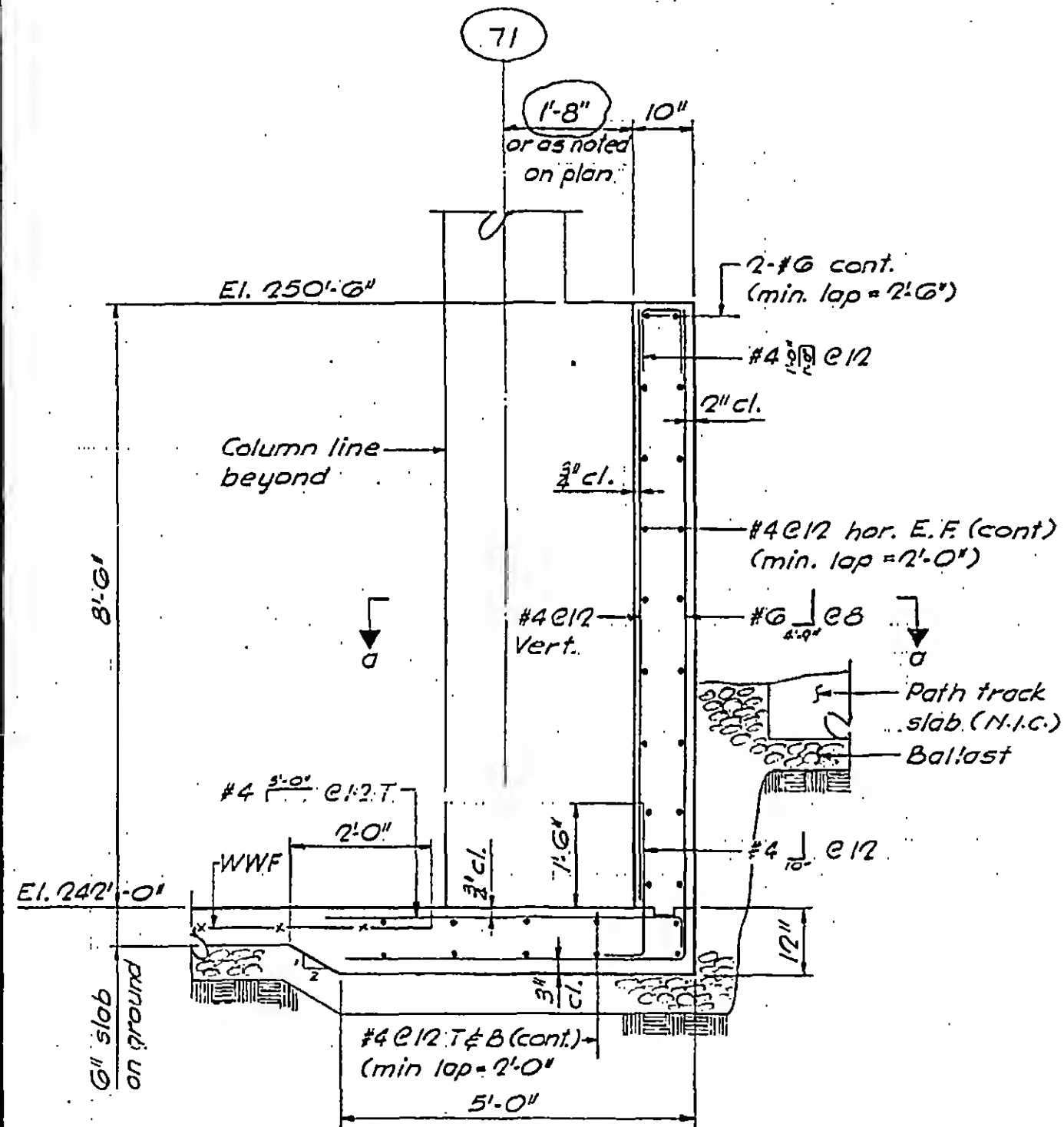
PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 10-31-69

REVISIONS

2-10-70



DESIGNED

E.L.

DRAWN

G.K.

REVIEWED

B-JK7-5.1

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

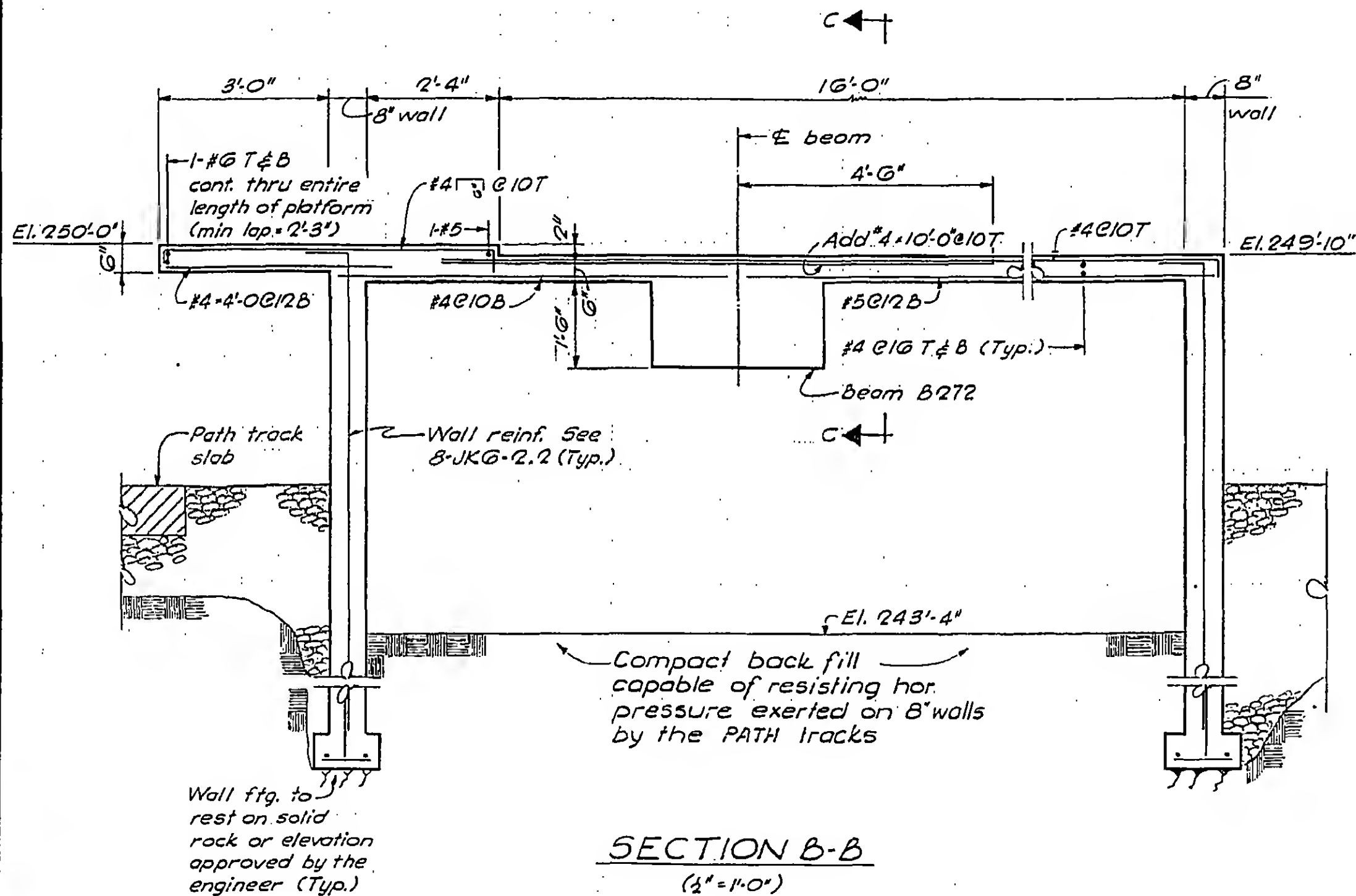
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-10-69

REVISIONS



DESIGNED

DRAWN  
G.K.REVIEWED  
E.L.

8-JK7-5.2

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

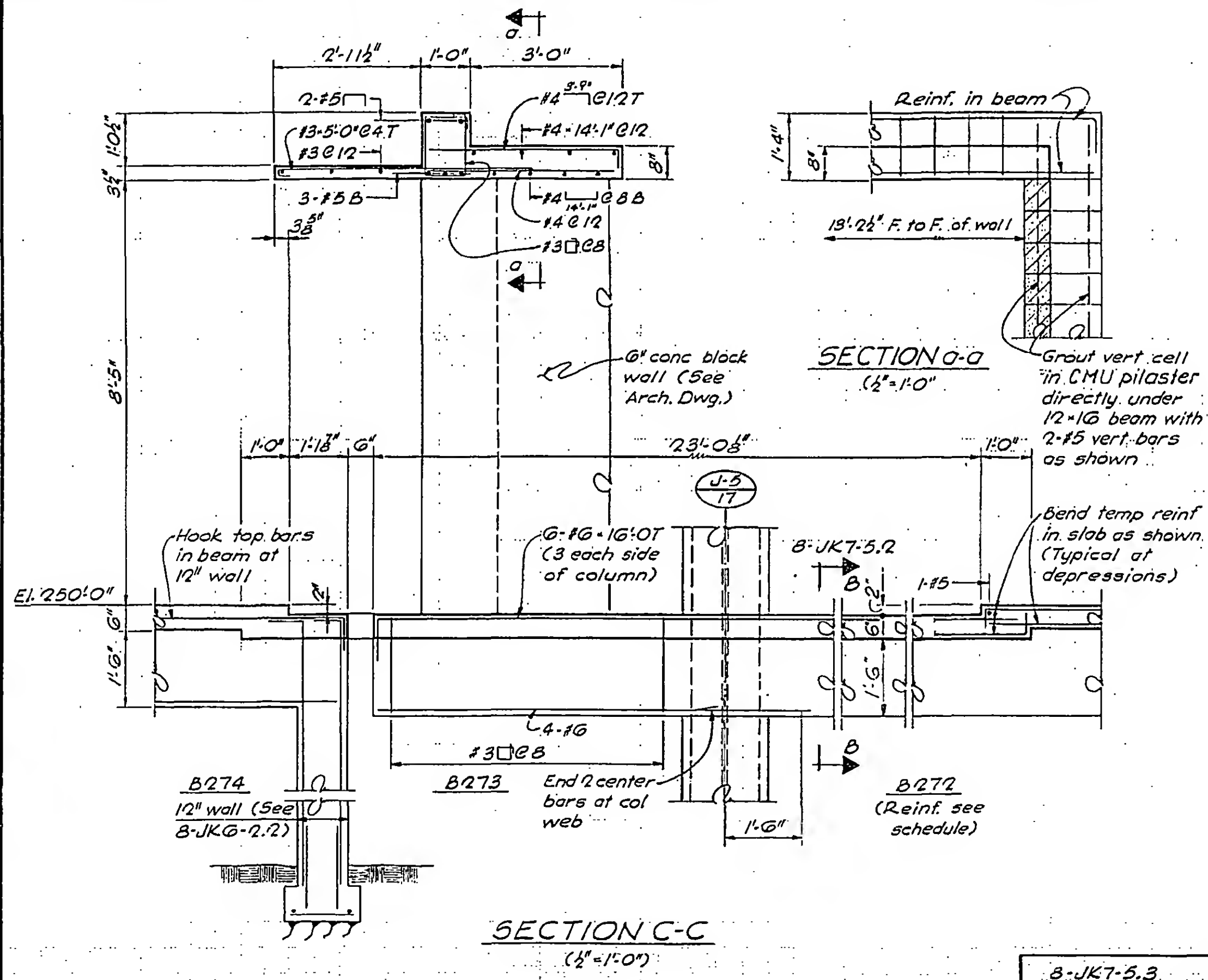
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-10-69

## REVISIONS



DESIGNED

DRAWN

G.K.

REVIEWED

E.L.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON,

Structural &amp; Civil Engineers

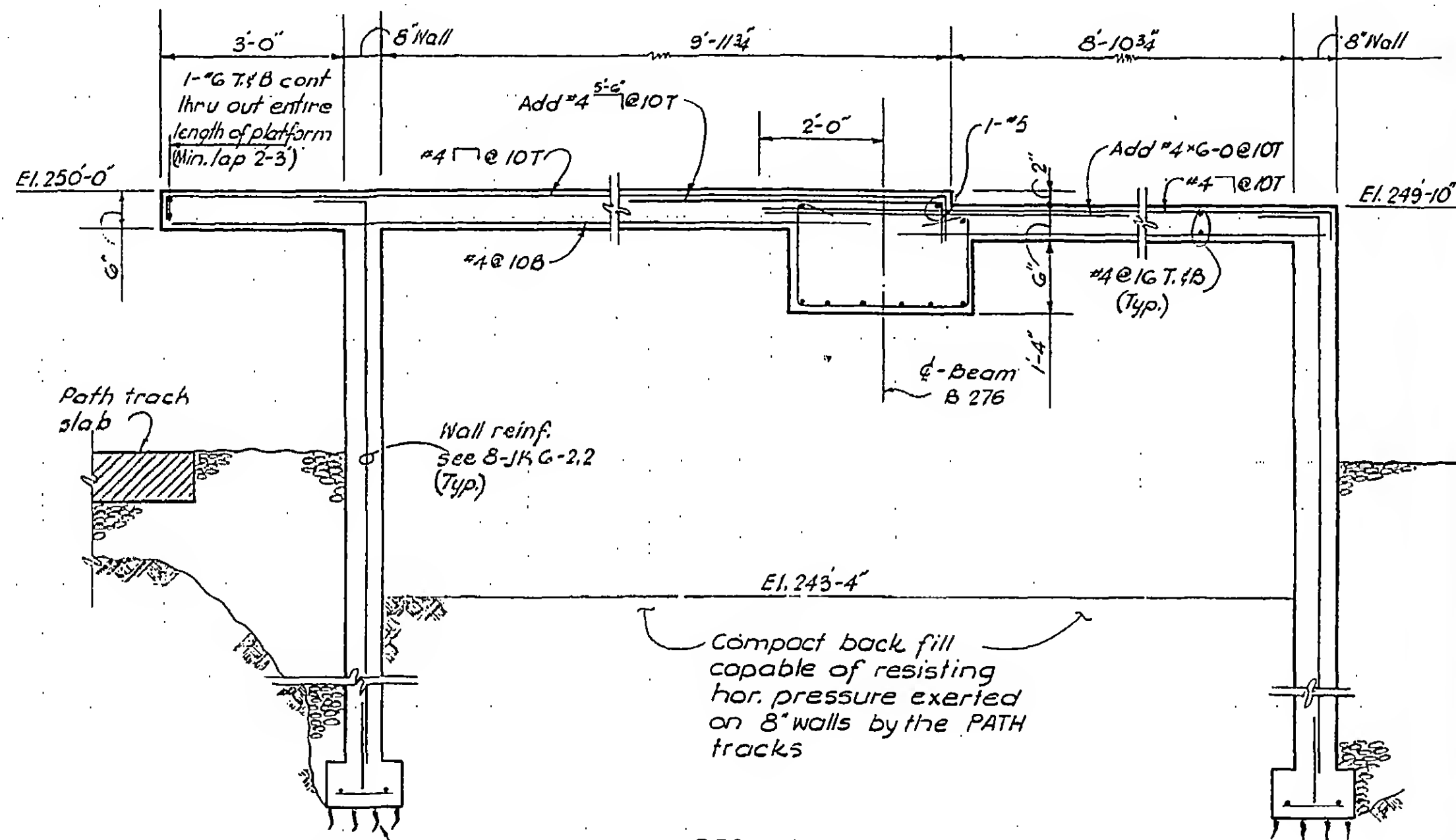
PROJECT THE WORLD TRADE CENTER

TITLE

PATH SECTIONS

DATE 12-10-69

REVISIONS

SECTION D-D  
(5'-1'-0")

DESIGNED

DRAWN

D.C. Huggins

REVIEWED

E.L.

8-JK7-5.4

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

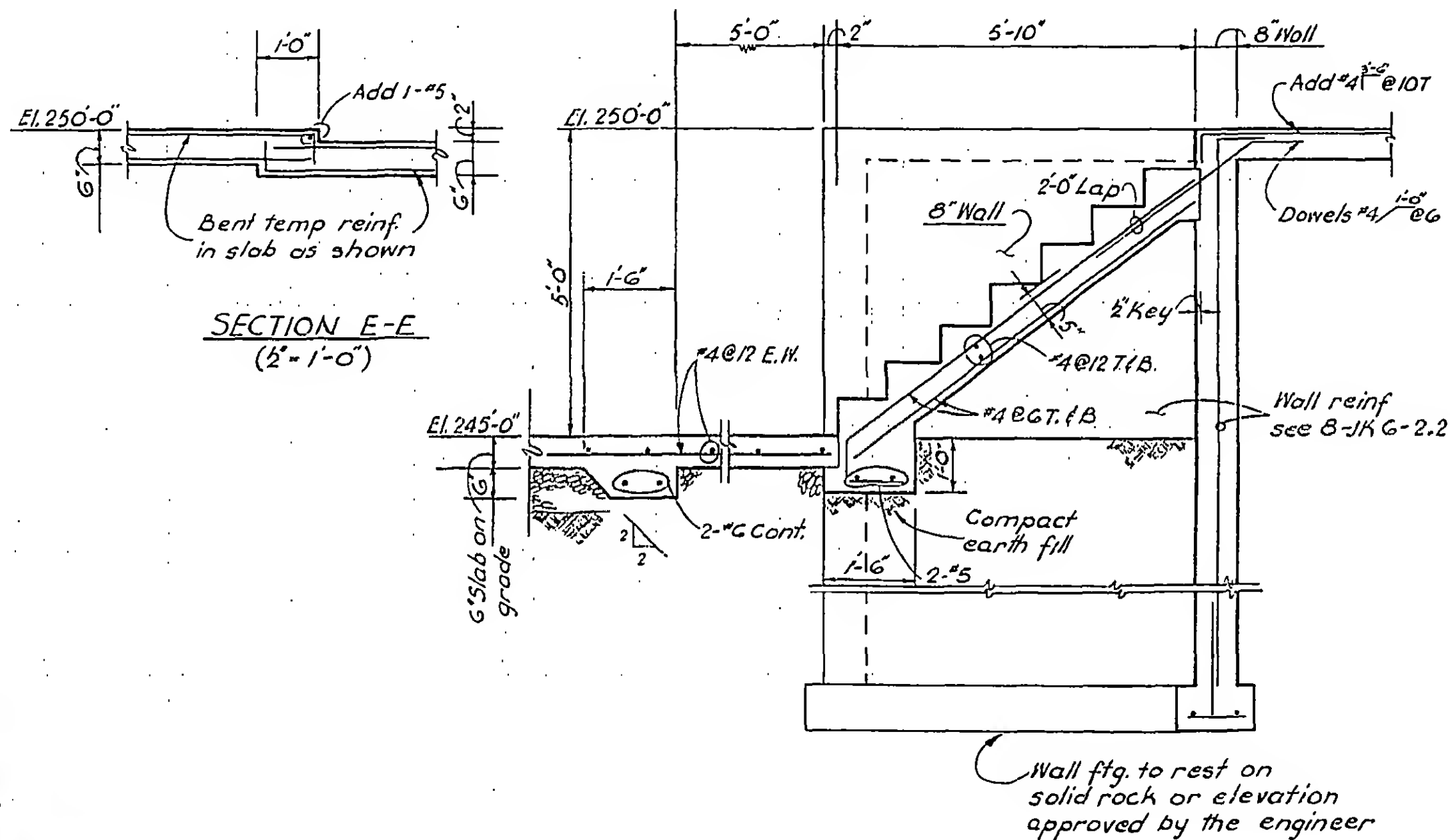
PROJECT THE WORLD TRADE CENTER

TITLE

PATH SECTIONS

DATE 12-10-69

REVISIONS



DESIGNED

DRAWN

D.C. Huggins

REVIEWED

E.L.

8-JK 7-5.5



## Structural & Civil Engineers

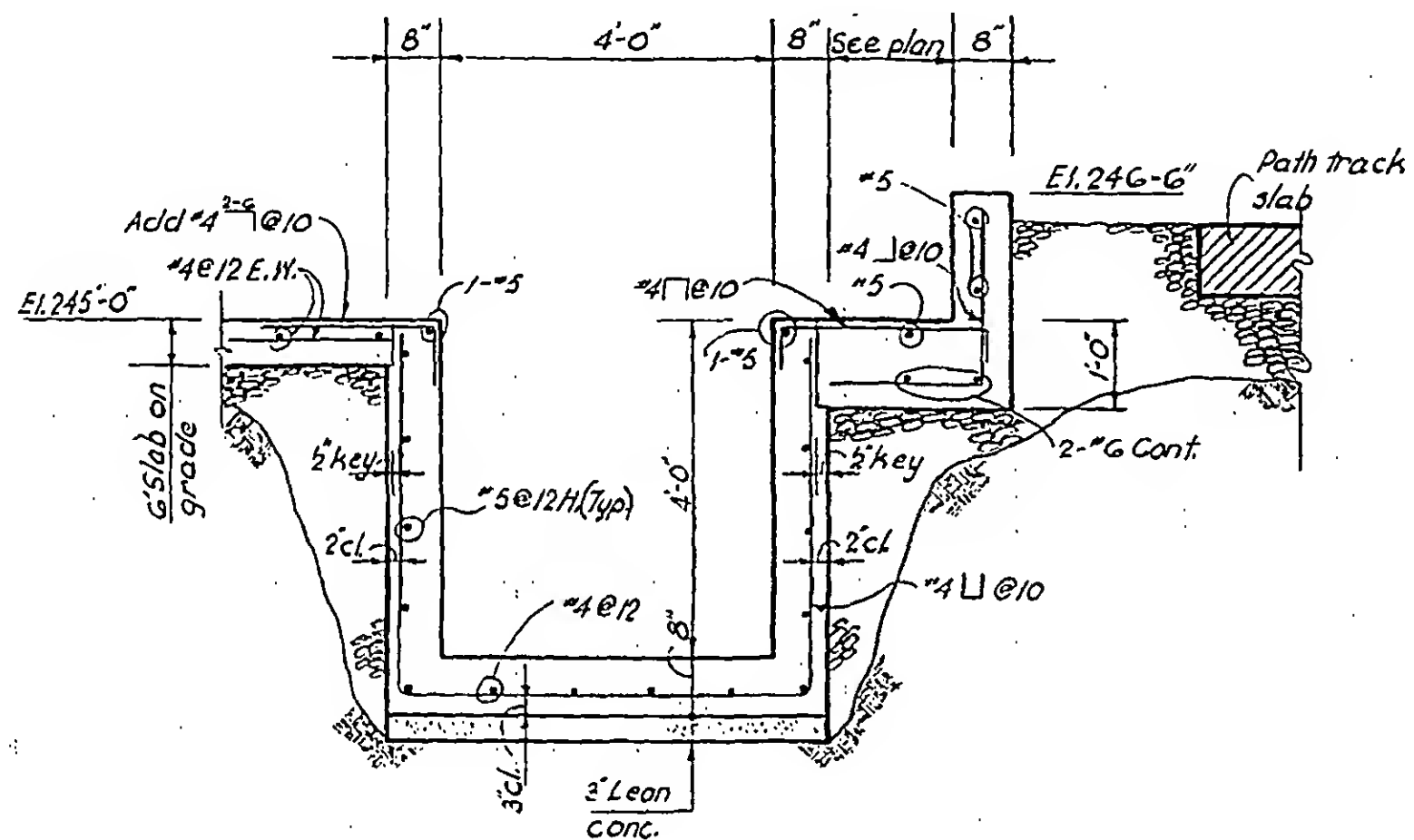
PROJECT *THE WORLD TRADE CENTER*

TITLE
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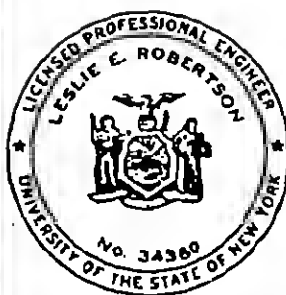
## PATH SECTIONS

DATE 12-10-69

## REVISIONS



SECTION G-G  
(2'-1'-0")



**DESIGNED**

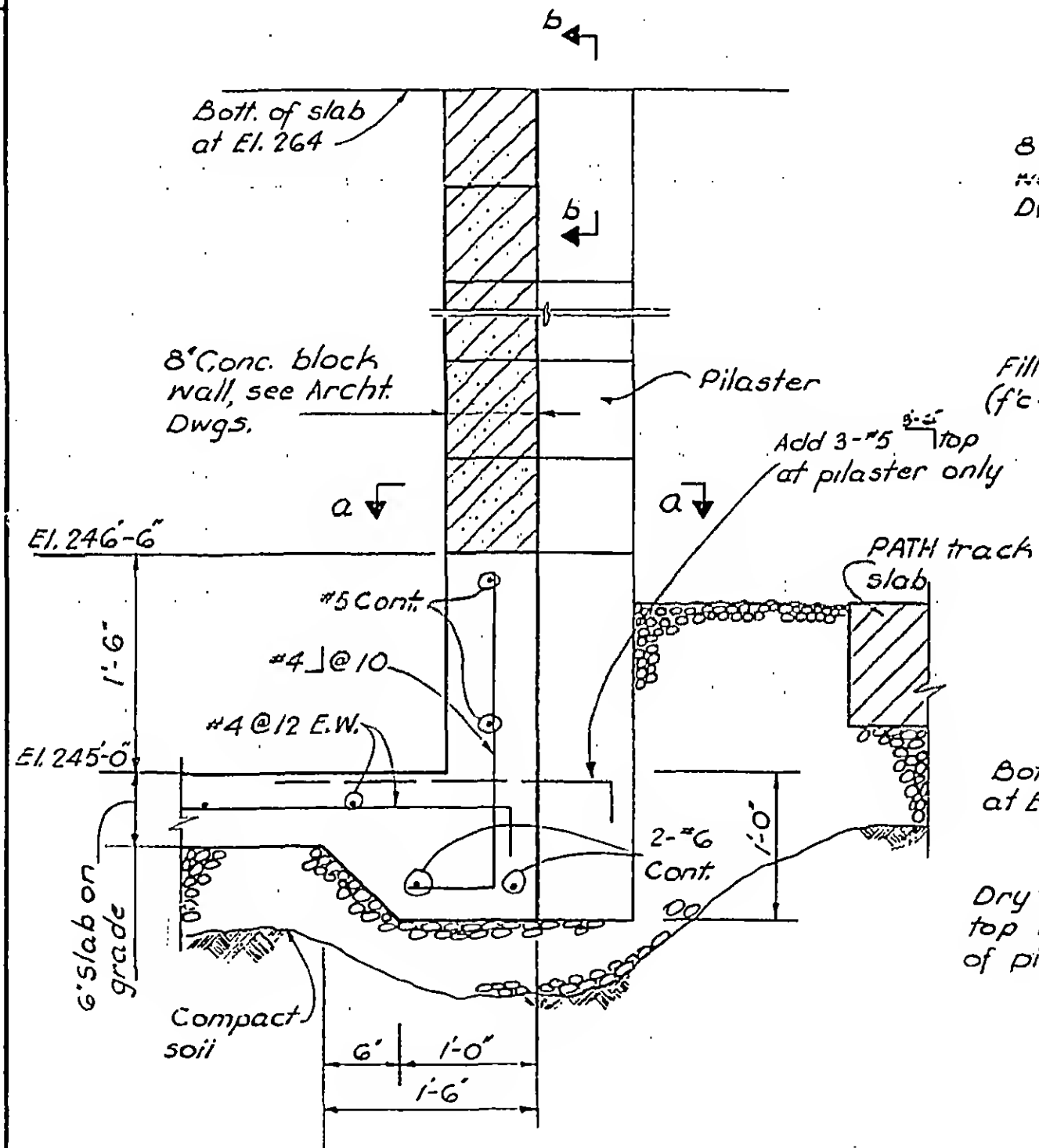
DRAWN  
D.C. Huggins

REVIEWED

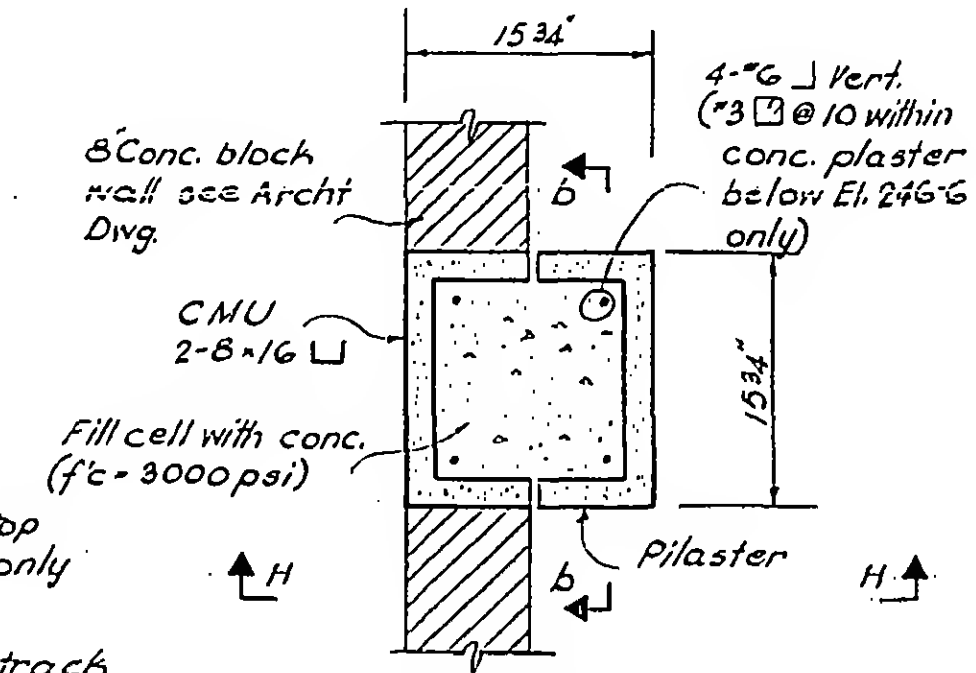
E.L.

8-JK7-5.6:

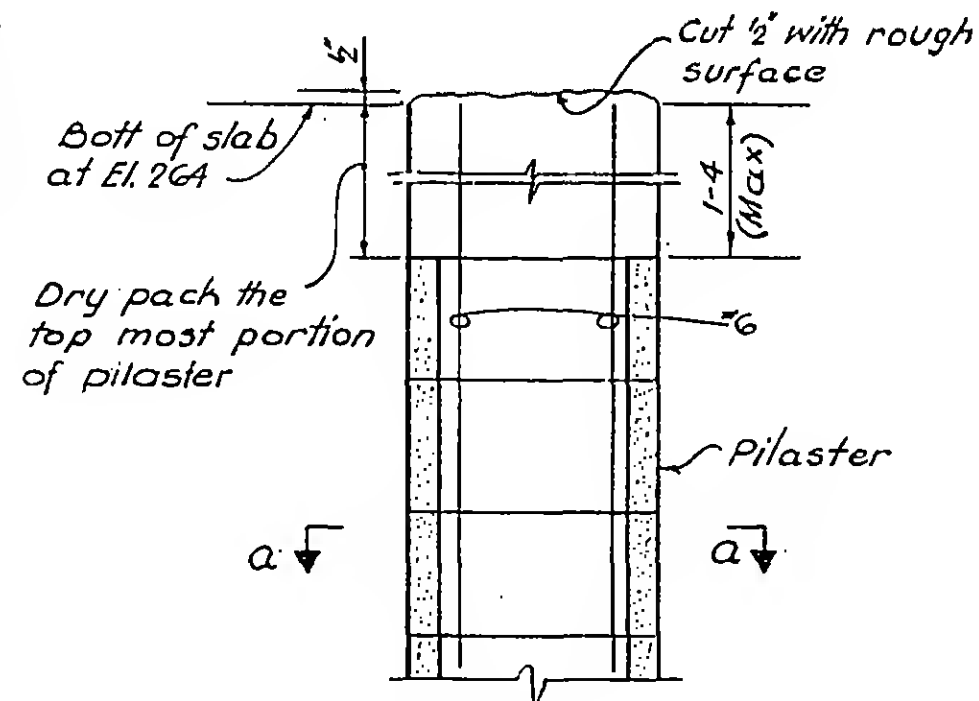
## REVISIONS



SECTION H-H  
(1" = 1'-0")



SECTION a-a  
(1" = 1'-0")



SECTION b-b  
(1" = 1'-0")



**DESIGNED**

DRAWN  
*D.C. Huggins*

REVIEWED

E.L.

8-JK 7-5.7

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

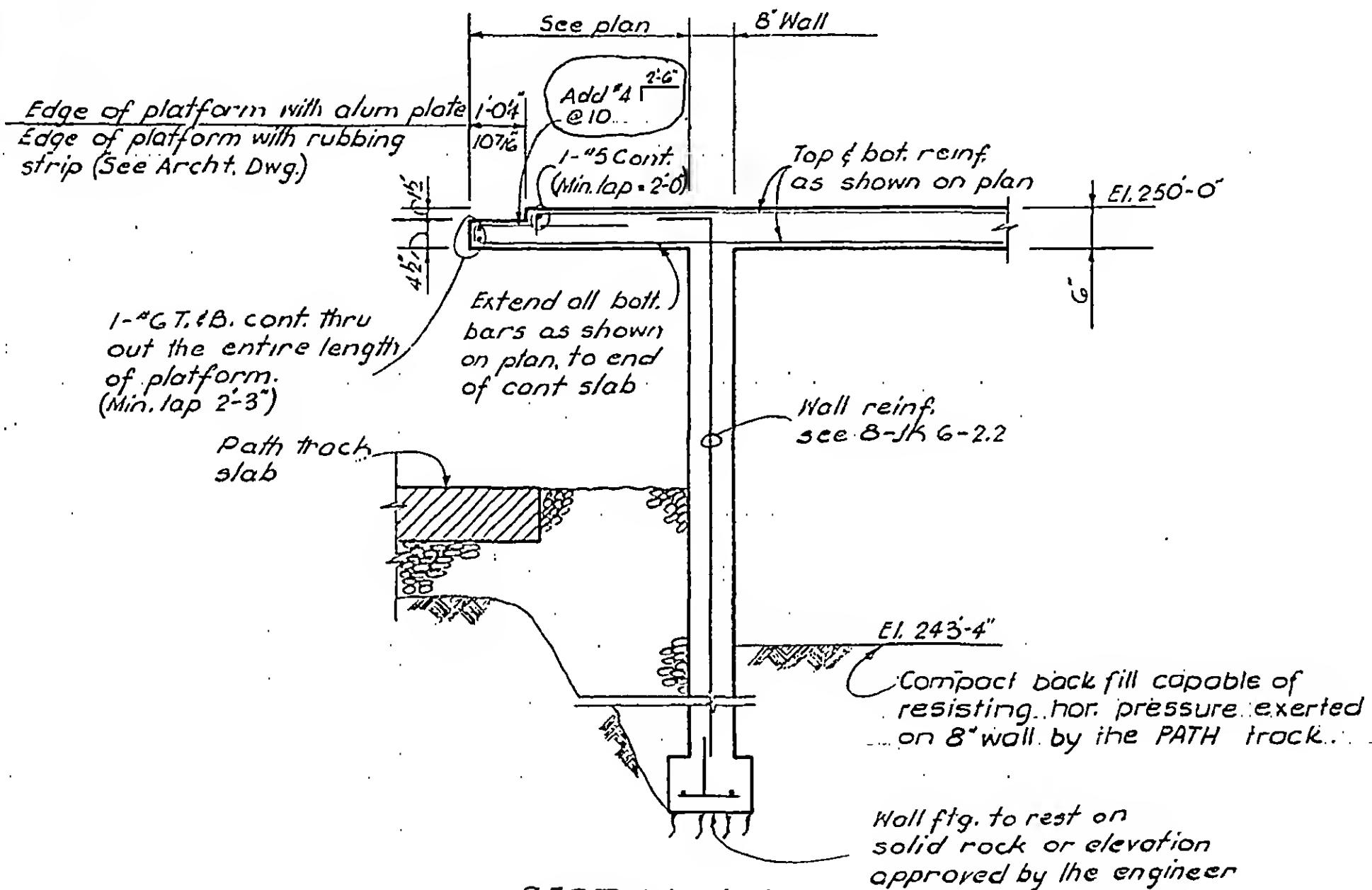
TITLE

PATH SECTIONS

DATE 12-10-69

REVISIONS

12-30-69

SECTION J-J  
(1/2" = 1'-0")

DESIGNED

DRAWN  
D.C. Huggins

REVIEWED

E.L.

8-JK7-5.8

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

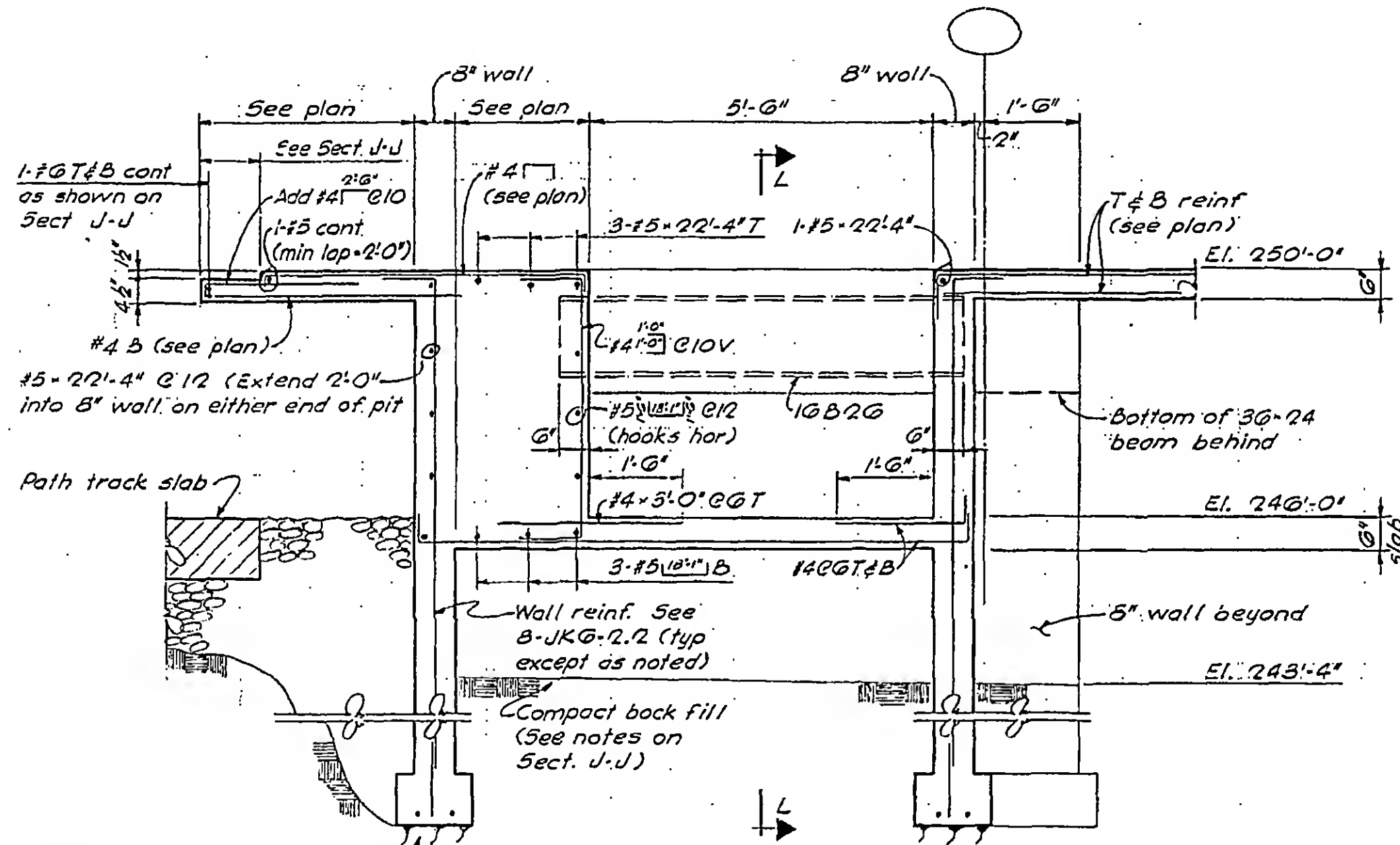
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

## REVISIONS

SECTION K-K  
(2'-1'-0")

DESIGNED

DRAWN

G.K.

REVIEWED

E.L.

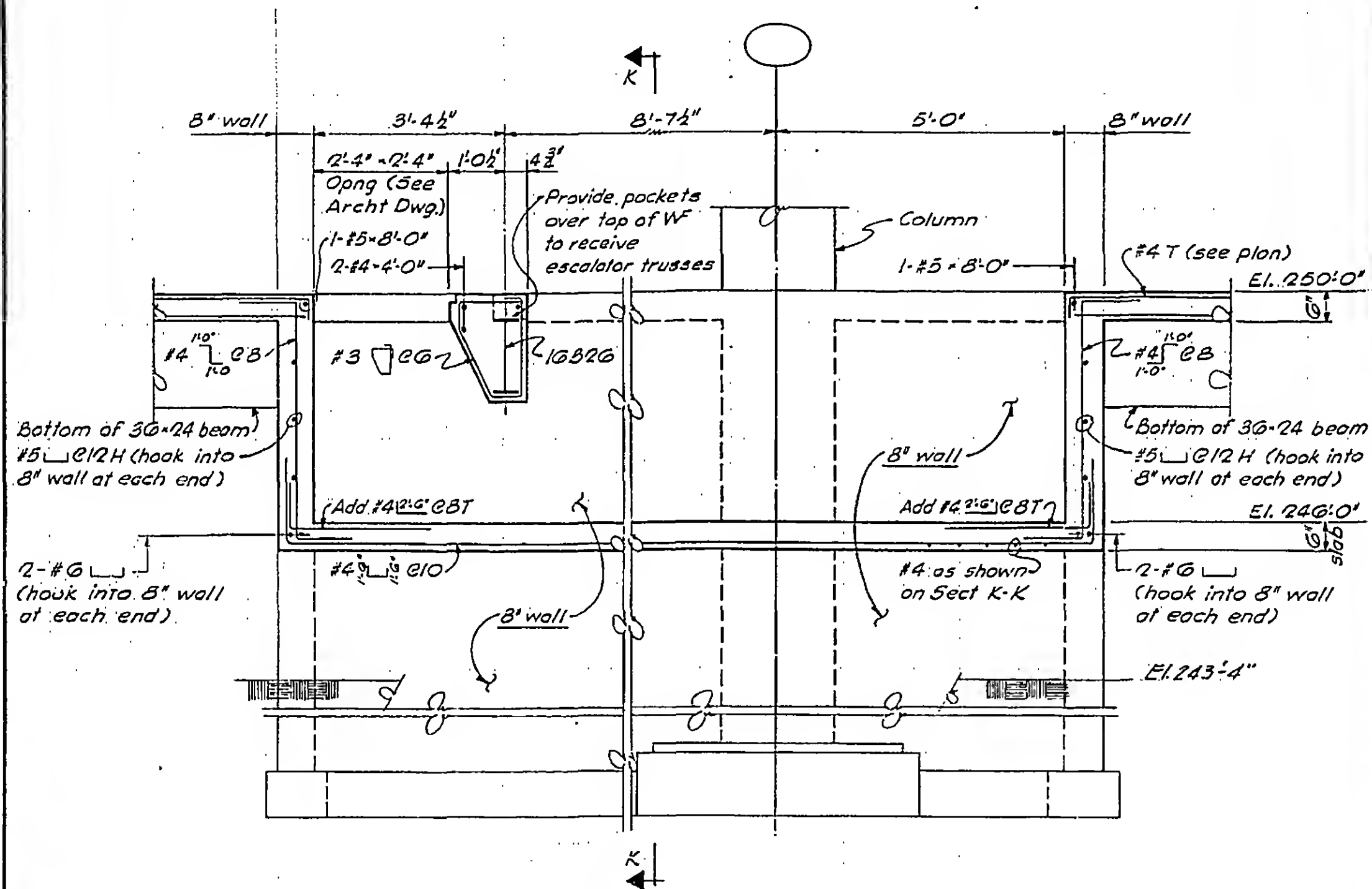
B-JK7-5.9

## Structural & Civil Engineers

TITLE	PATH. SECTIONS
-------	----------------

DATE 12-22-69

## REVISIONS



SECTION L-L  
(1/2" = 1'-0")



**DESIGNED**

DRAWN  
G. K.

REVIEWED  
E.L.

8 JK 7-5.10

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

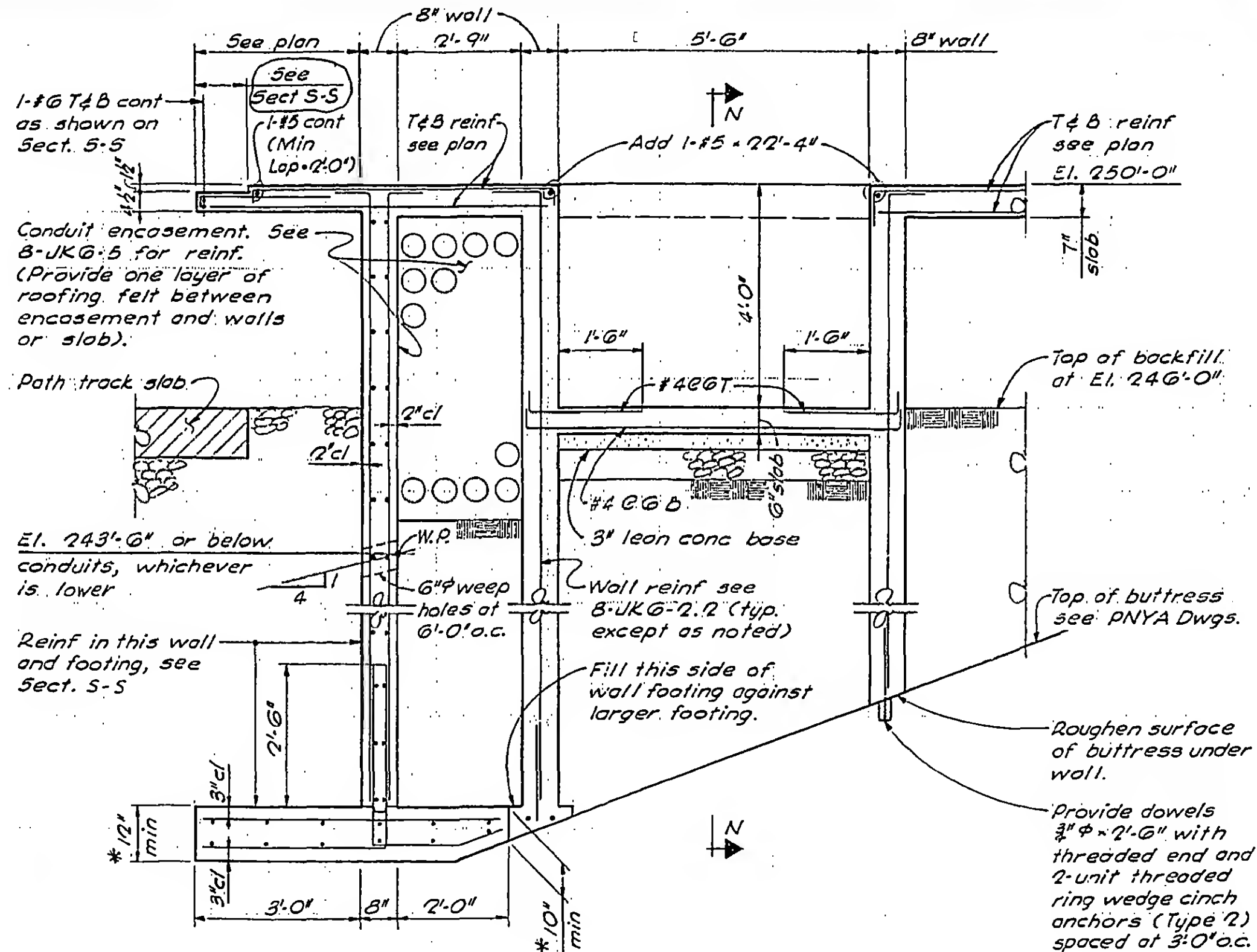
PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

REVISIONS

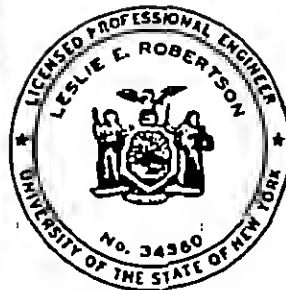
12-30-69



\* whichever governs

SECTION M-M  
(1/2" = 1'-0")

B-JK7-5.1.1

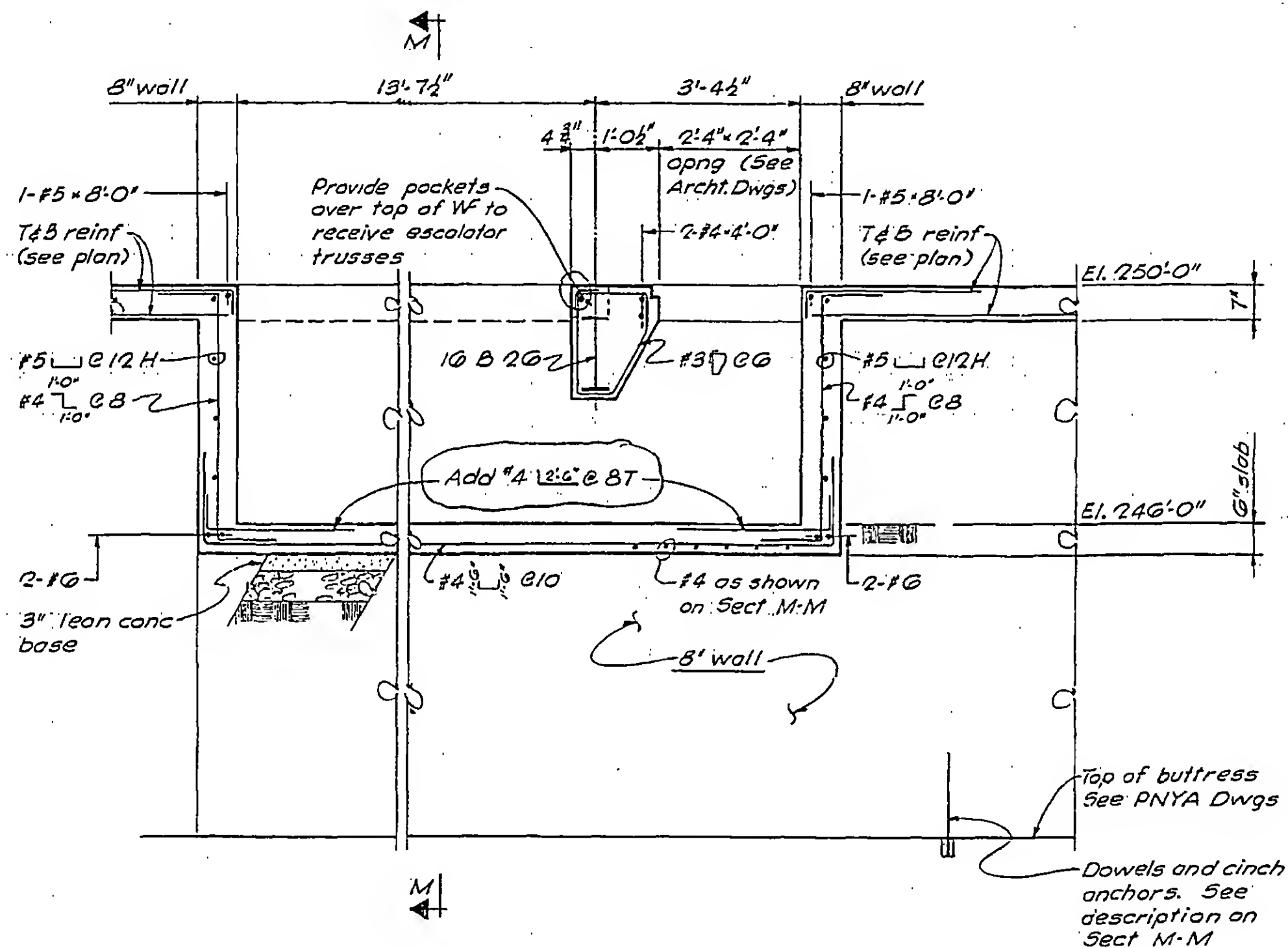


DESIGNED

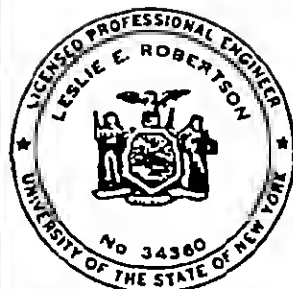
DRAWN  
G.K.REVIEWED  
E.L.

## REVISiONS

12-30-69



SECTION N-N  
( $\frac{1}{2}" = 1'-0"$ )



## DESIGNER

**DRAWN**

G.K.

REVIEWED

E.L.

8-JK7-5:12

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

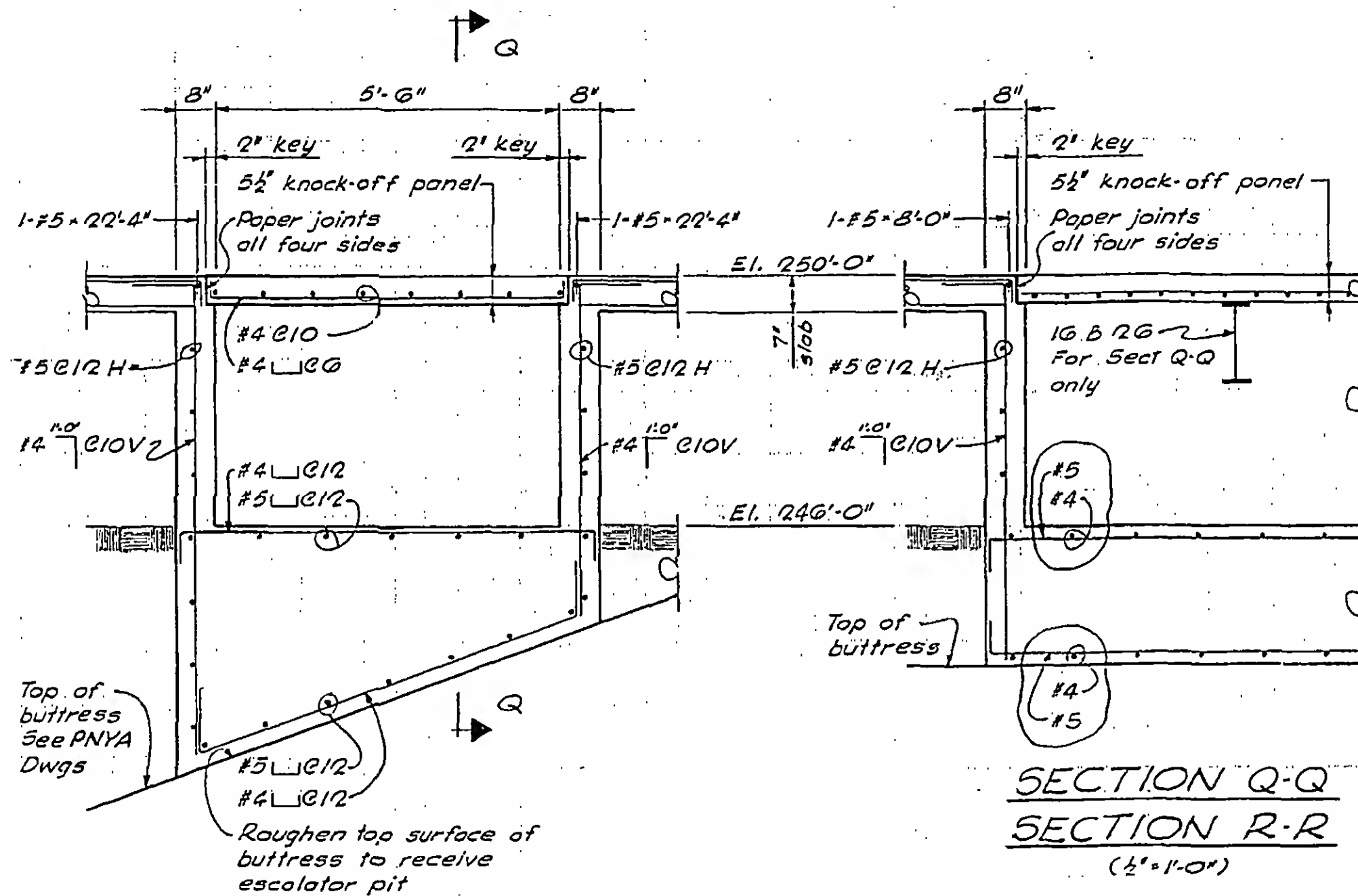
PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

## REVISIONS

12-30-69



DESIGNED

DRAWN

G.K.

REVIEWED

E.L.

8-JK7-5.13



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

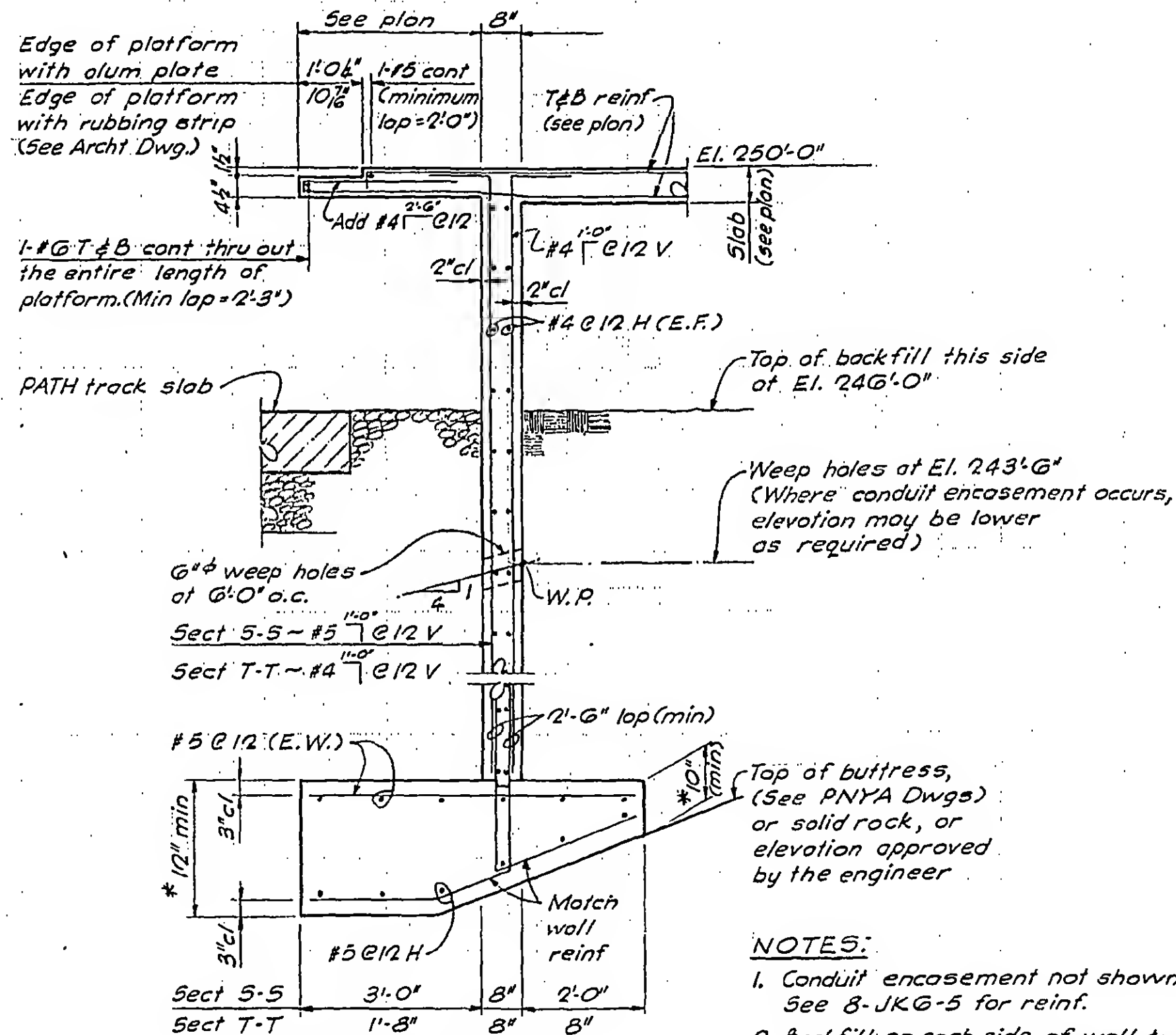
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

REVISIONS



## NOTES:

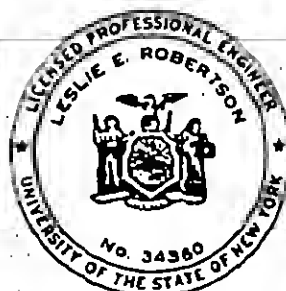
1. Conduit encasement not shown. See 8-JK6-5 for reinf.
2. Backfill on each side of wall to be carried simultaneously.

SECTION S-S

SECTION T-T

(2" = 1'-0")

\* Whichever governs



DESIGNED

DRAWN

G.K.

REVIEWED

E.L.

3-UK7-5.14



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

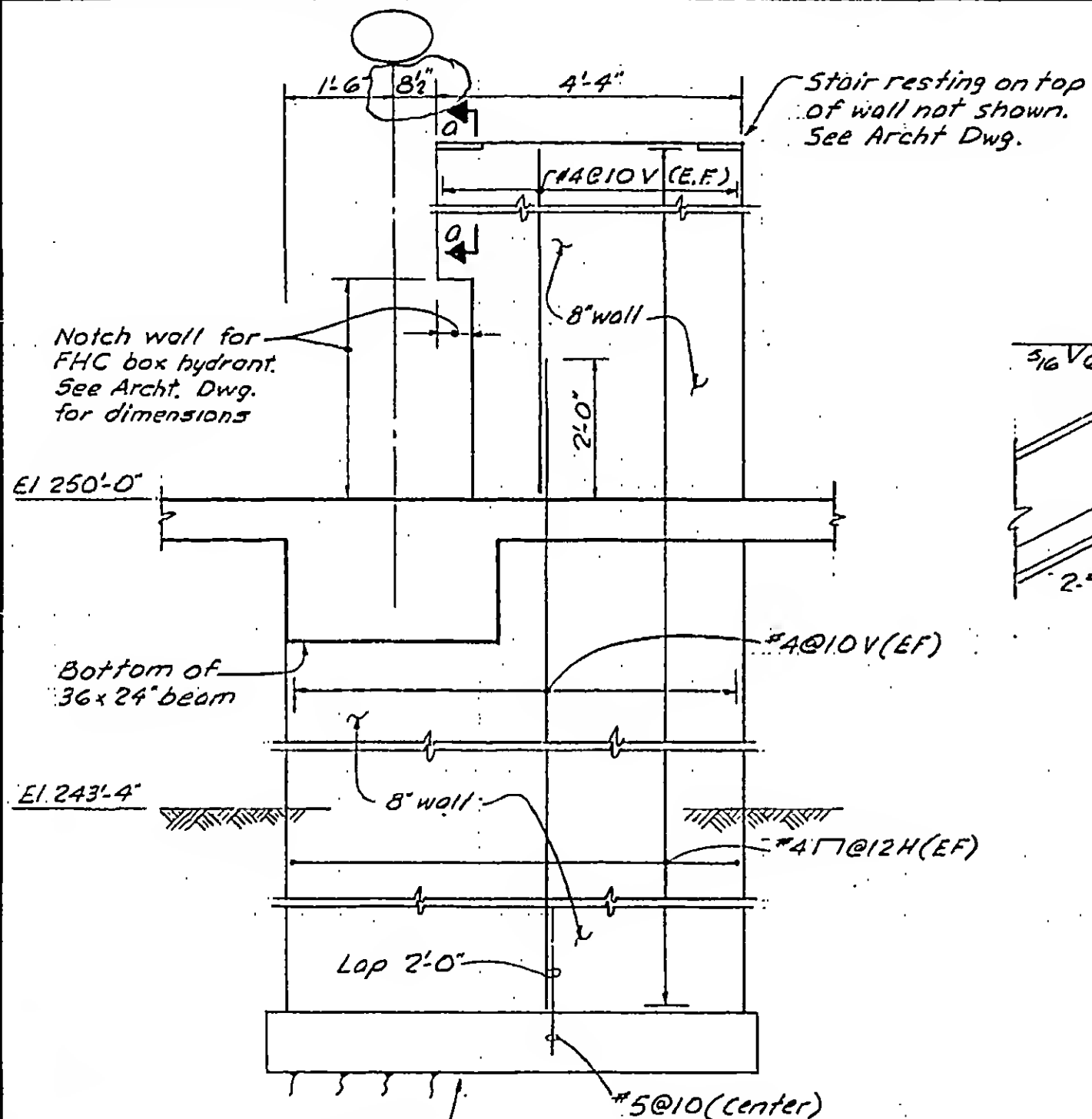
TITLE PATH SECTIONS

DATE 12-22-69

## REVISIONS

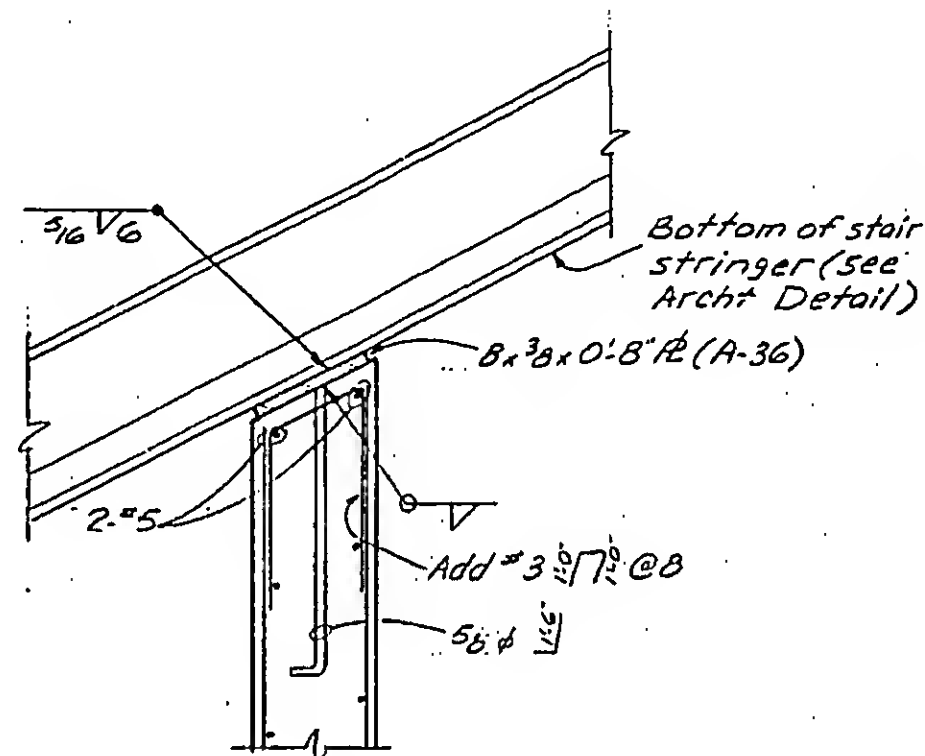
12-30-69

3-4-70



Wall footing to rest on solid rock or elevation approved by the Engineer

SECTION W-W  
(1/2" = 1'-0")



SECTION A-A  
(1" = 1'-0")



DESIGNED

DRAWN  
A. FRANQUI

REVIEWED

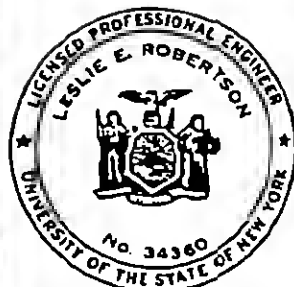
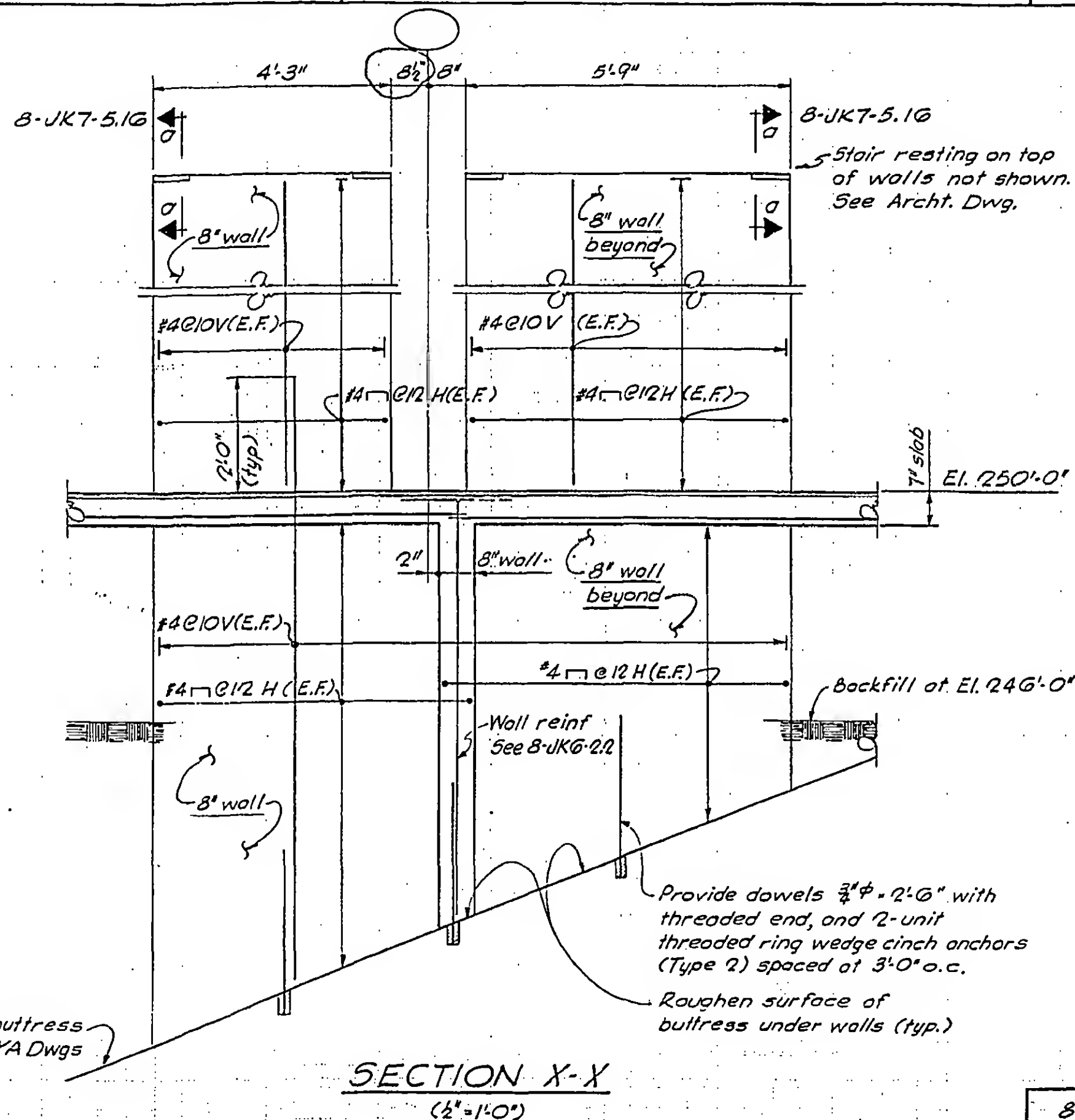
E.L.

8-JK7-5.16

## REVISIONS

12-30-69

3-4-70



**DESIGNED**

DRAWN  
G.K.

REVIEWED  
E. L.

8-JK7-5.17

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

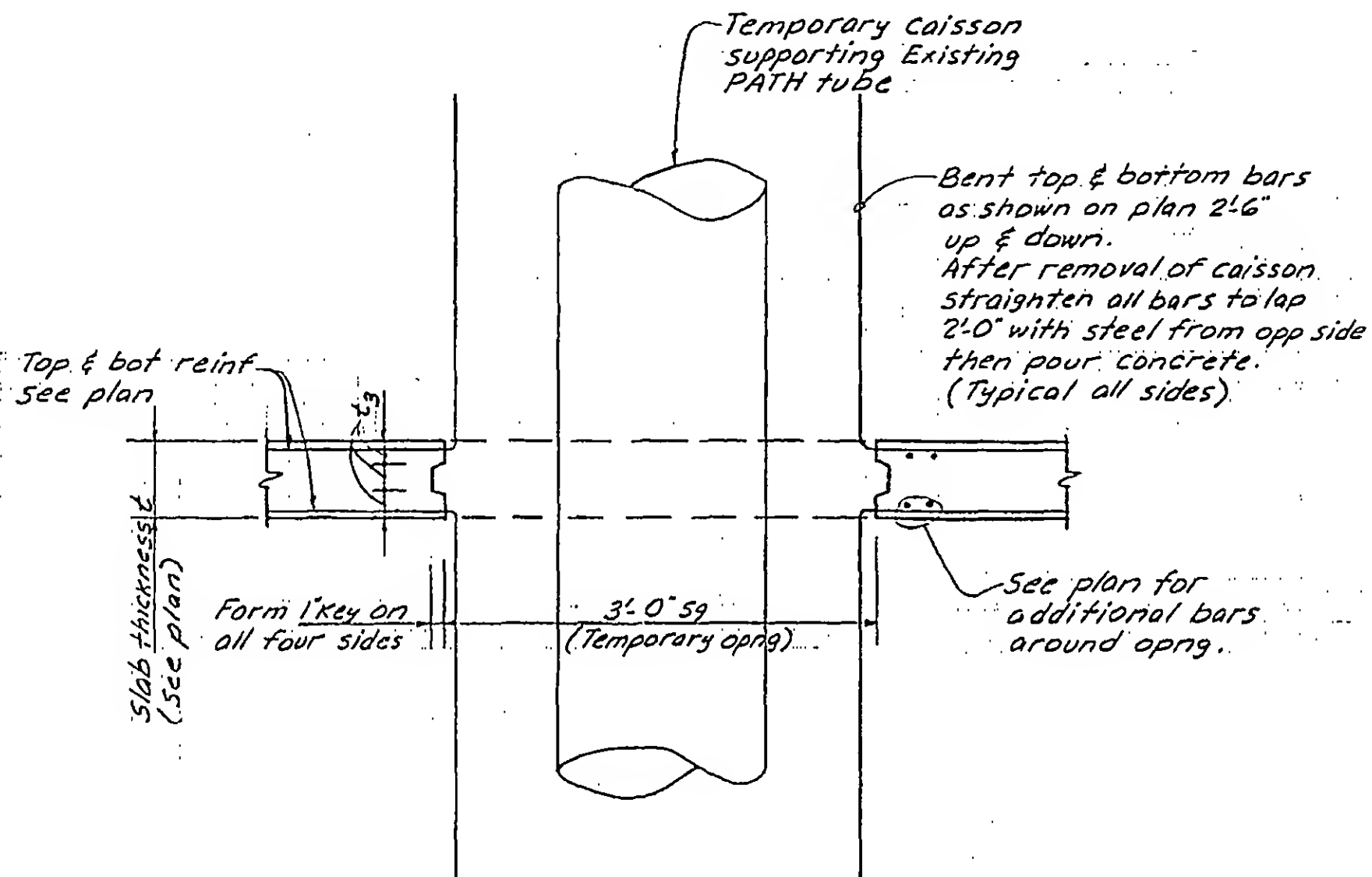
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

## REVISIONS



SECTION Y-Y  
(1" = 1'-0")



DESIGNED

DRAWN  
A. FRANQUIREVIEWED  
E.L.

8-JK7-5.18

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

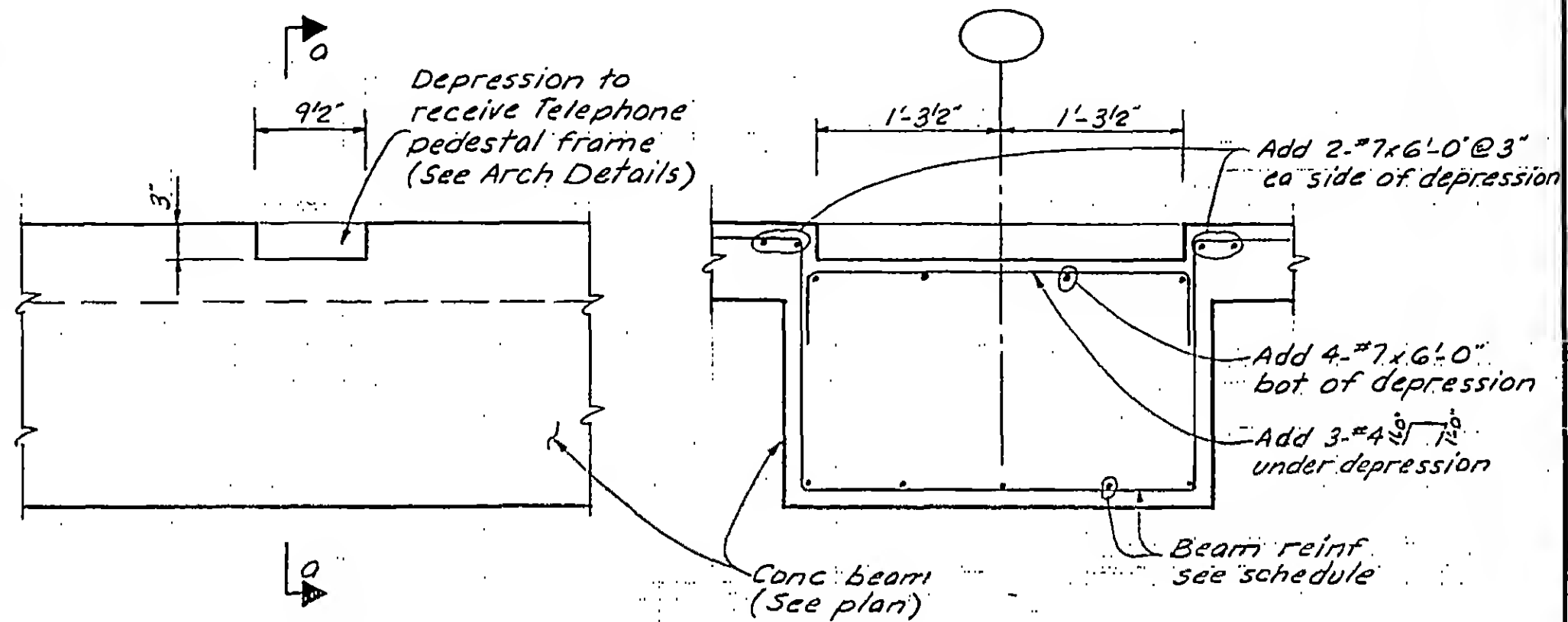
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

REVISIONS



SECTION Z-Z  
(1"=1'-0")

SECTION A-A  
(1"=1'-0")

DESIGNED  
E. LIUDRAWN  
A. FRANQUI

REVIEWED

8-JK7-5.19

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON

Structural &amp; Civil Engineers

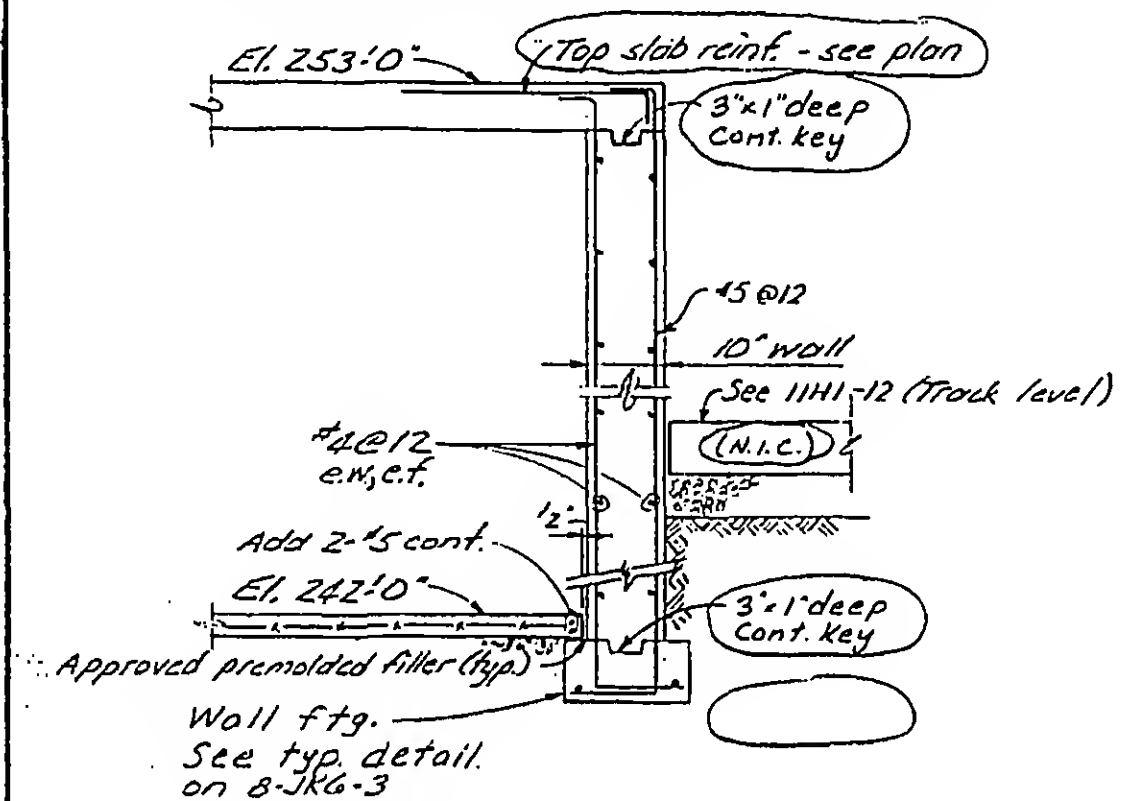
PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 5-1-68

## REVISIONS

7-9-68  
12-18-68  
5-5-69



DRAWN  
S.C.  
REVIEWED  
J.M. & E.L.

8-JK7-6.3

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

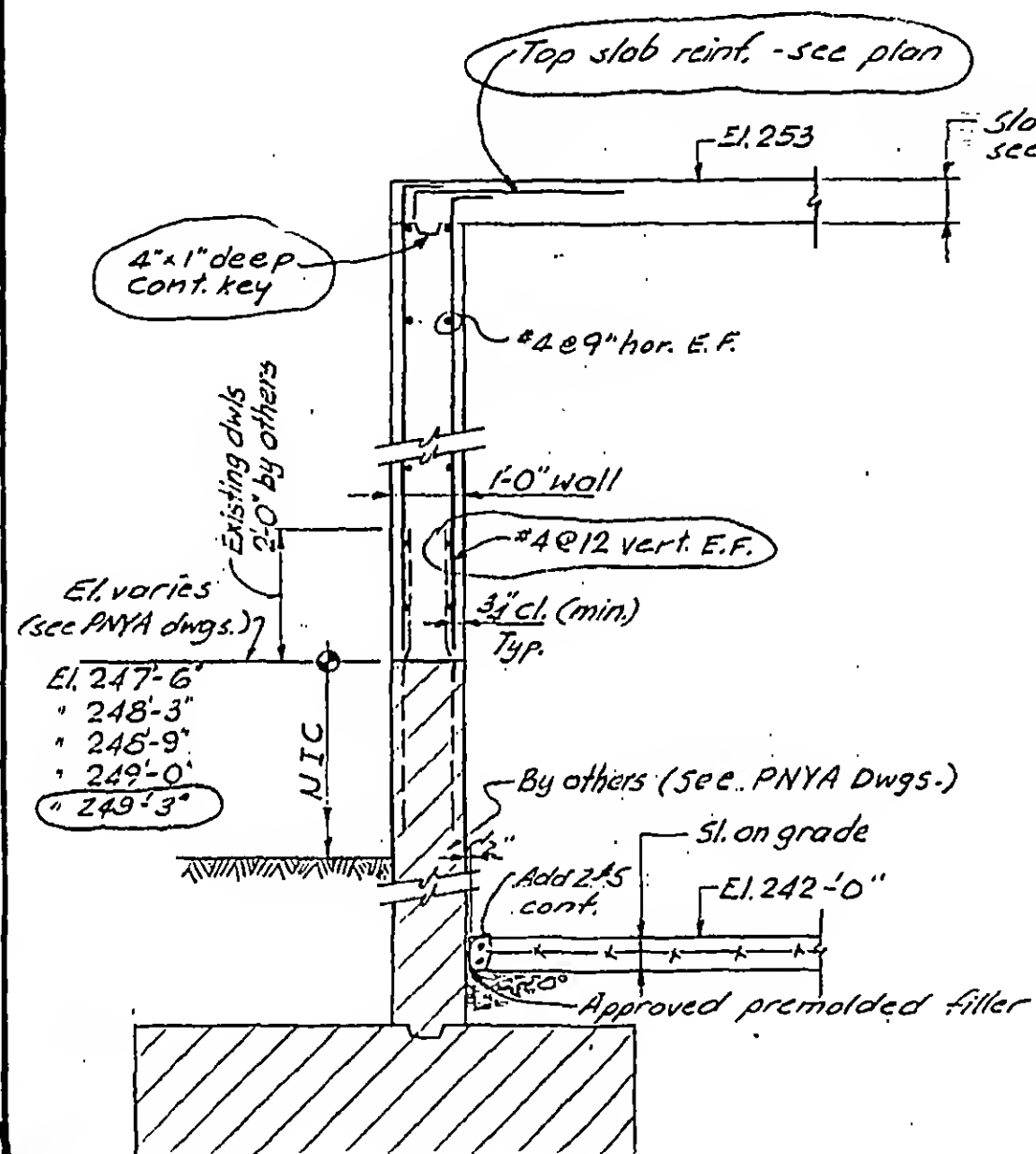
PROJECT THE WORLD TRADE CENTER

TITLE SECTIONS

DATE 12-18-68

REVISIONS

5-5-69



DESIGNED

DRAWN

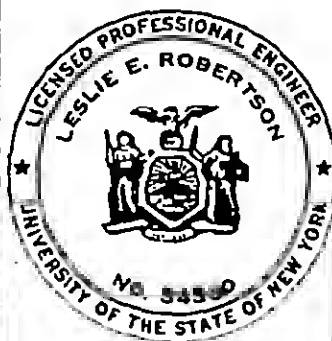
S.C.

REVIEWED

J.M. &amp; E.L.

8-JK7-G.5





DESIGNED  
DRAWN  
S.C.  
REVIEWED

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS.

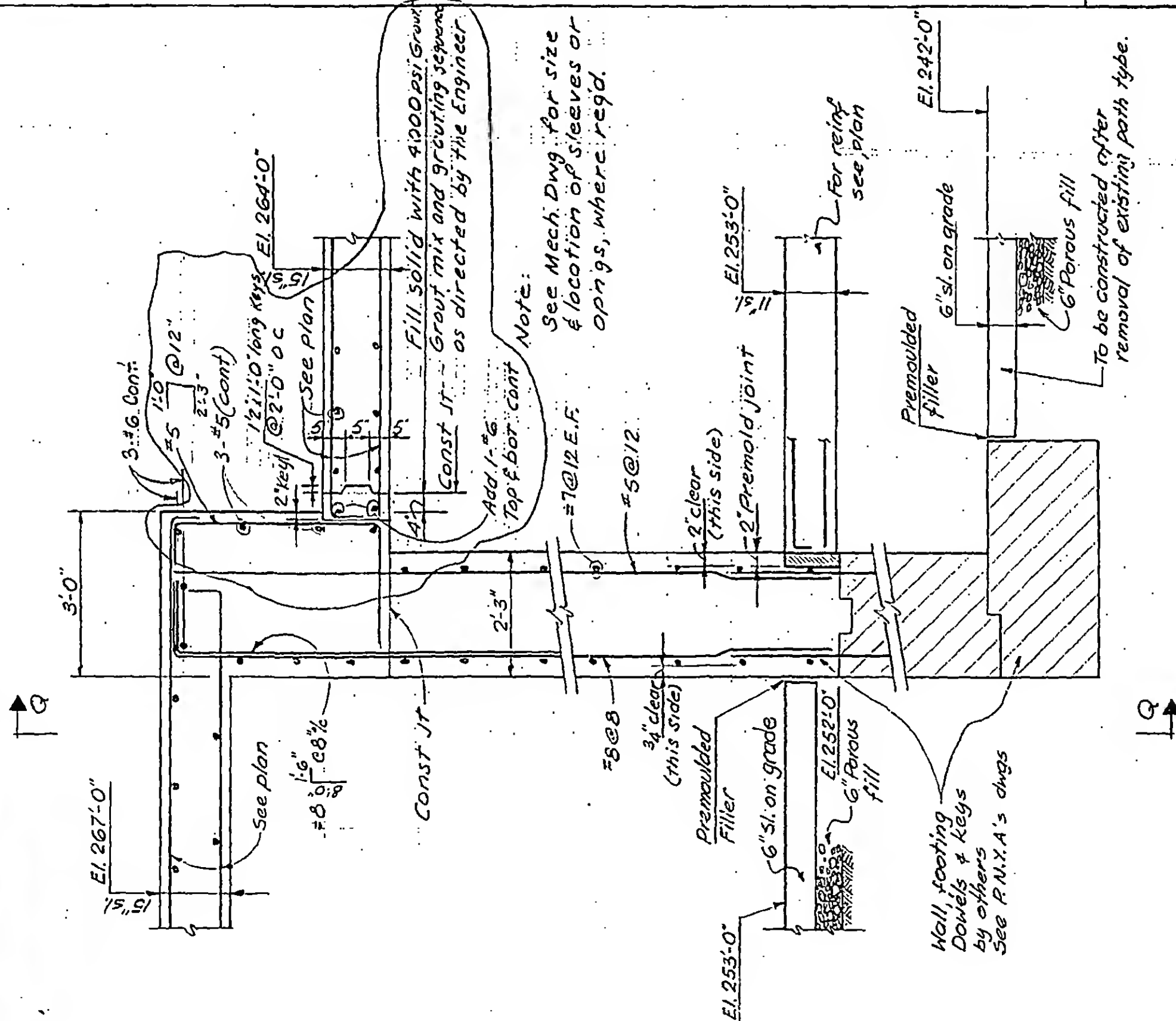
DATE 12-18-68

REVISIONS

2-20-69

3-7-69

4-21-69



Section P-P

8-JK7-6.9

SKILLING, HELLE. CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT **THE WORLD TRADE CENTER**

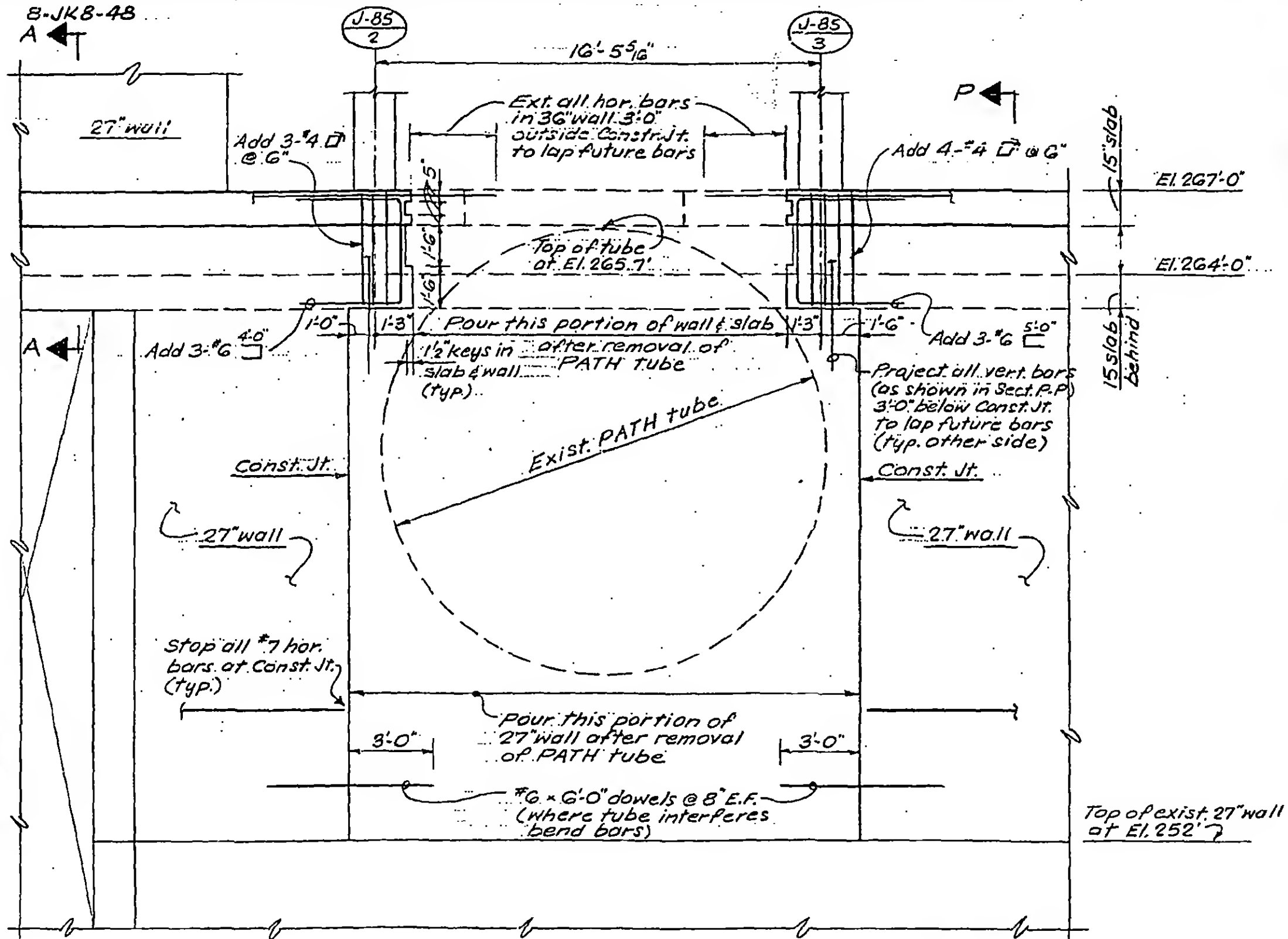
TITLE

**PATH SECTIONS**DATE **4-21-69**

REVISIONS

8-JK8-48

A



Section Q-Q

P



DESIGNED

DRAWN  
S.C.REVIEWED  
E.L.

8-JK7-6.10

SKILLING, HELLE. CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

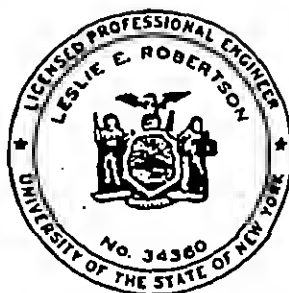
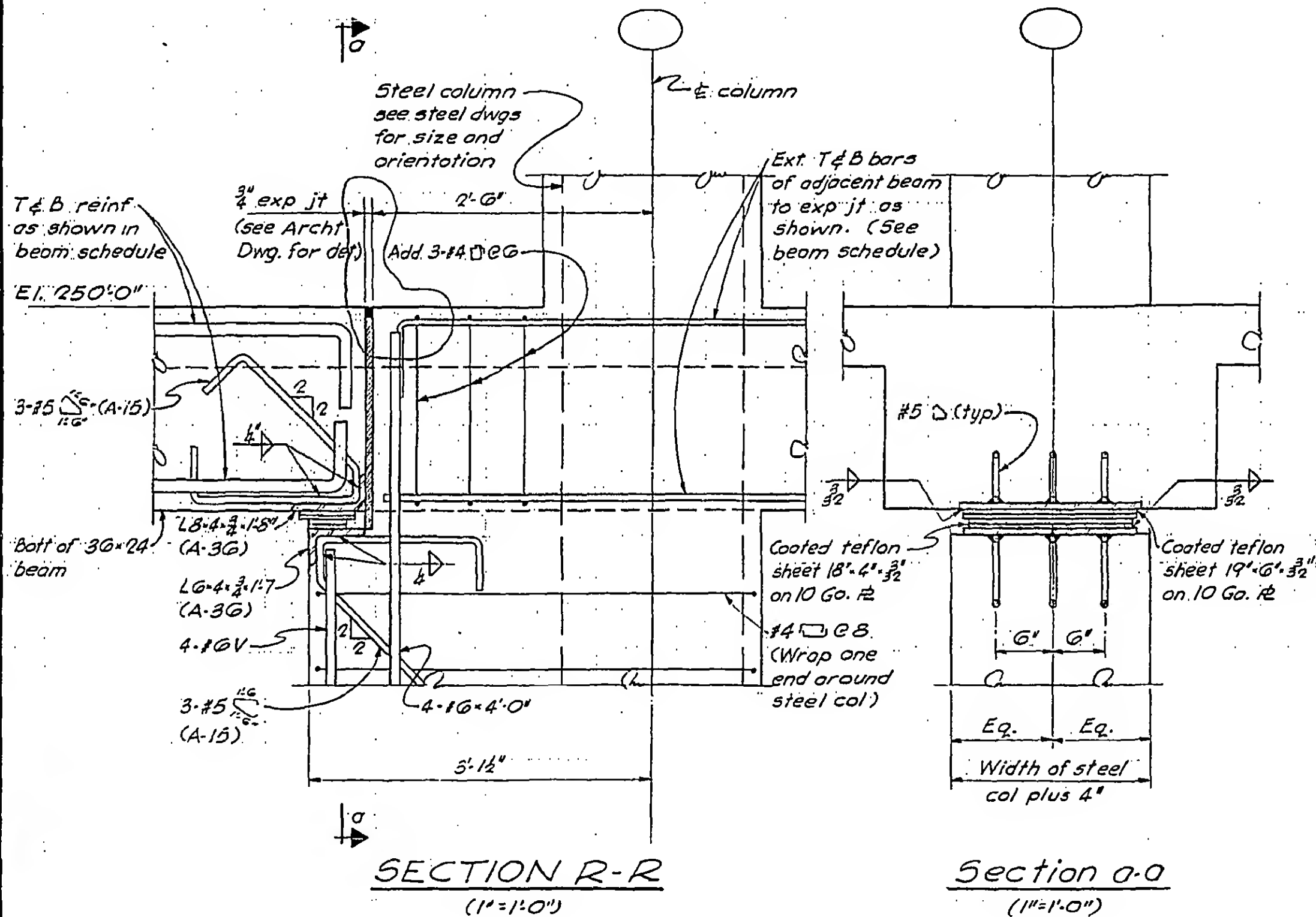
PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 12-22-69

REVISIONS

5-28-70



DESIGNED

DRAWN

G. K.

REVIEWED

E. L.

B-JK7-6.11

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

TITLE

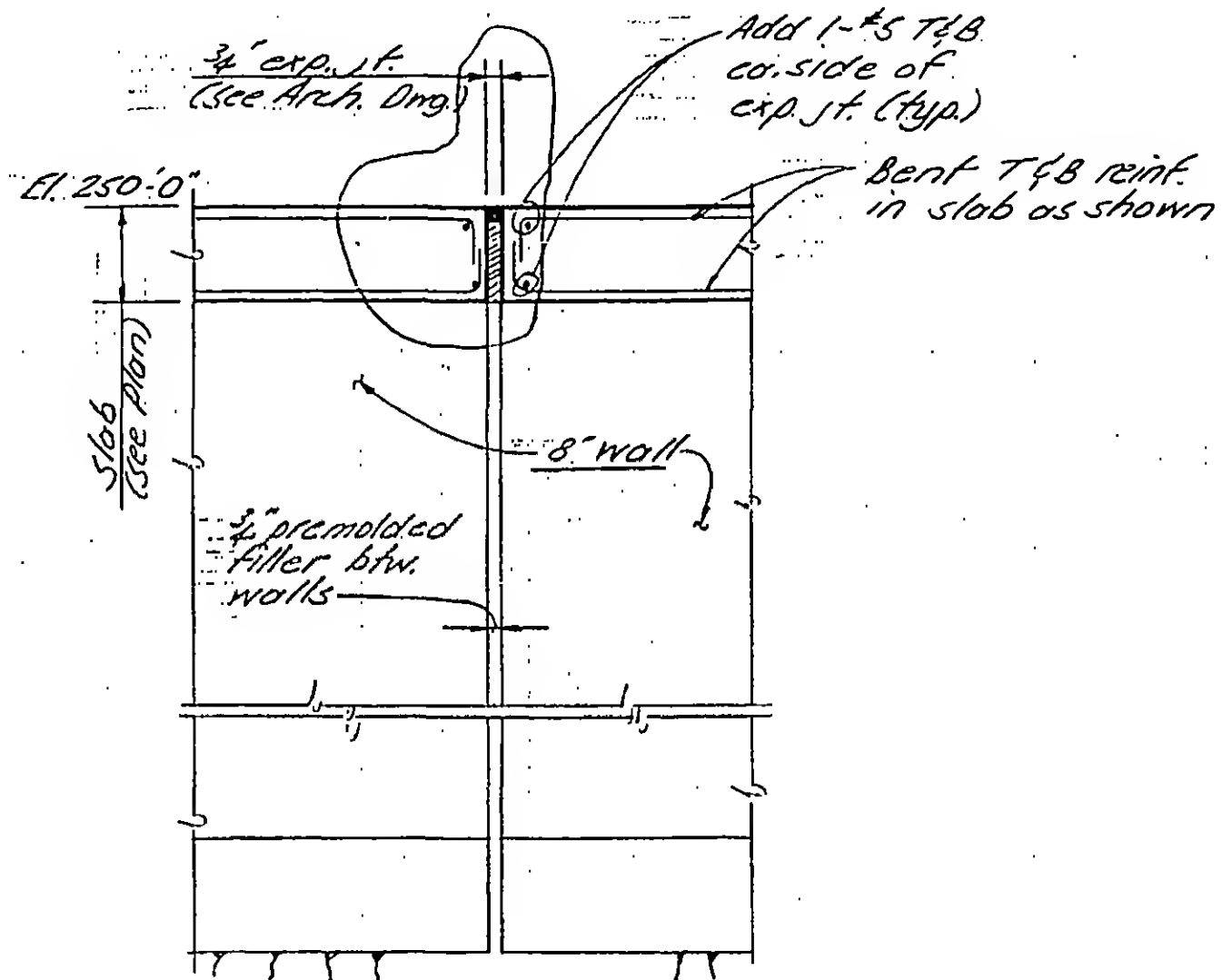
PATH SECTIONS

DATE

12-22-69

REVISIONS

5-28-70



Section 5-5  
(1"=1'-0")



DESIGNED

DRAWN  
J. Adams

REVIEWED

E.L.

8-JK7-6.12

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

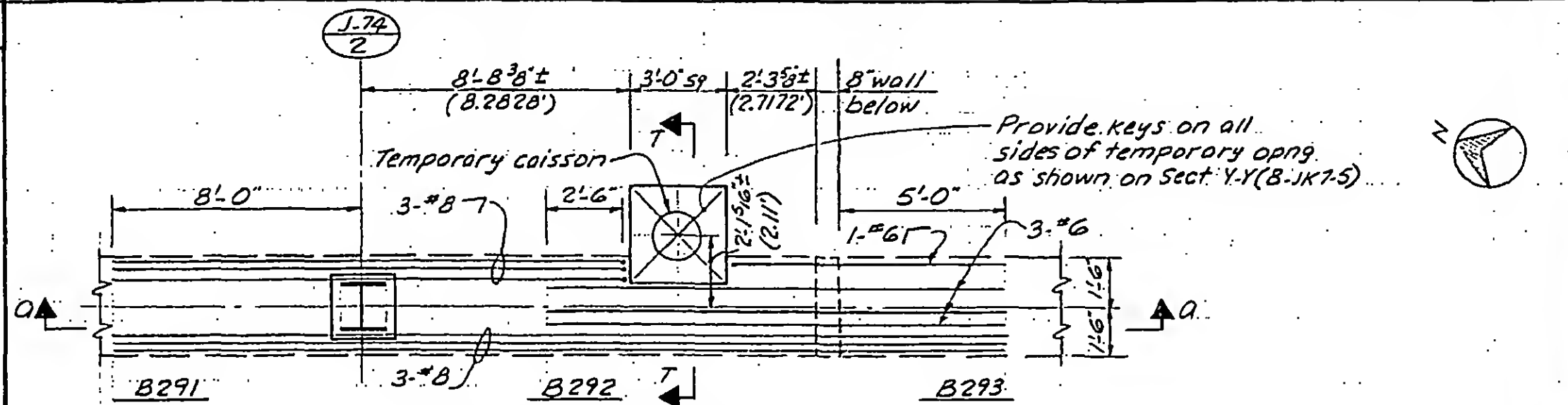
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

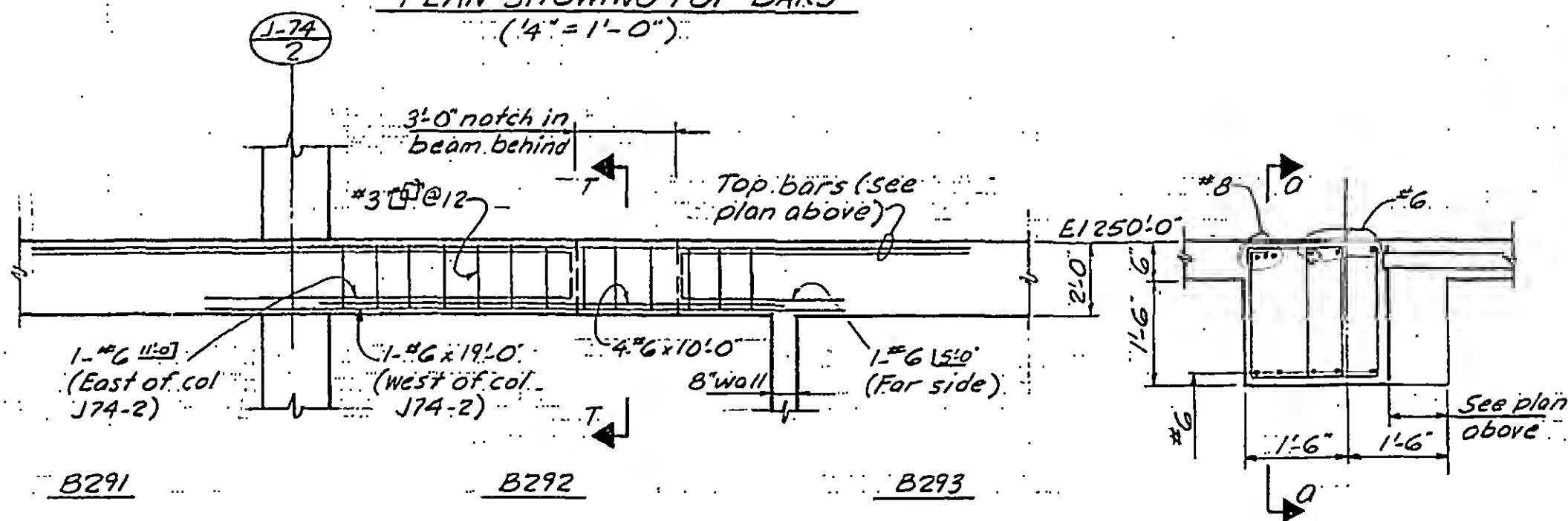
DATE 12-22-69

## REVISIONS



PLAN SHOWING TOP BARS

('4" = 1'-0")



SECTION A-A

('4" = 1'-0")

SECTION T-T

('2" = 1'-0")

(See plan above for top bars)

DESIGNED  
E. LIUDRAWN  
A. FRANQUI

REVIEWED

B-JK7-6.13

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

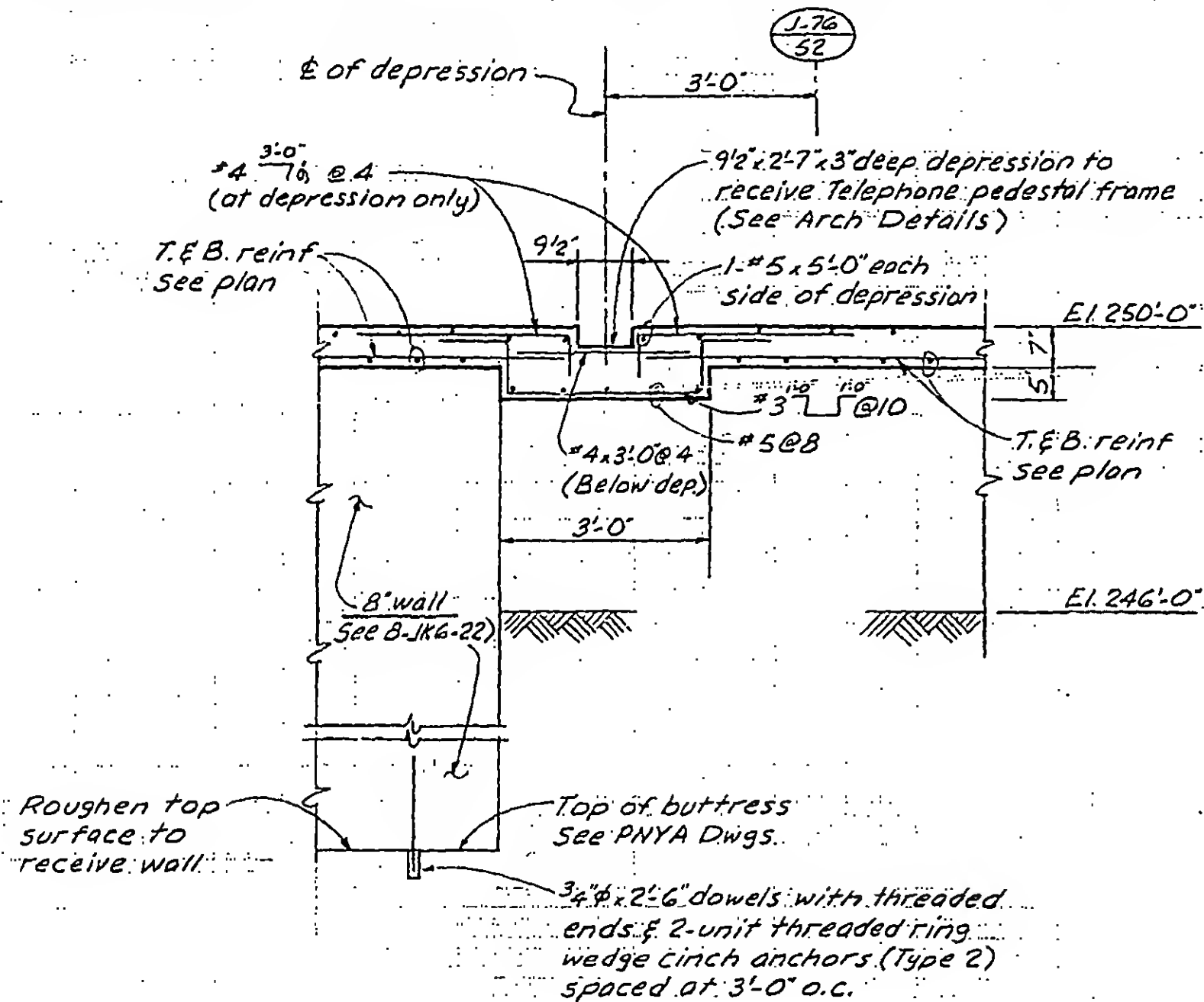
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 2-25-70

## REVISIONS



SECTION U-U

DESIGNED  
K.H.DRAWN  
A.L.F.REVIEWED  
E.L.

1/2" = 1'-0"

B-JK7-6.14

SKILLING, HELLE. CHRISTIANSEN, ROBERTSON

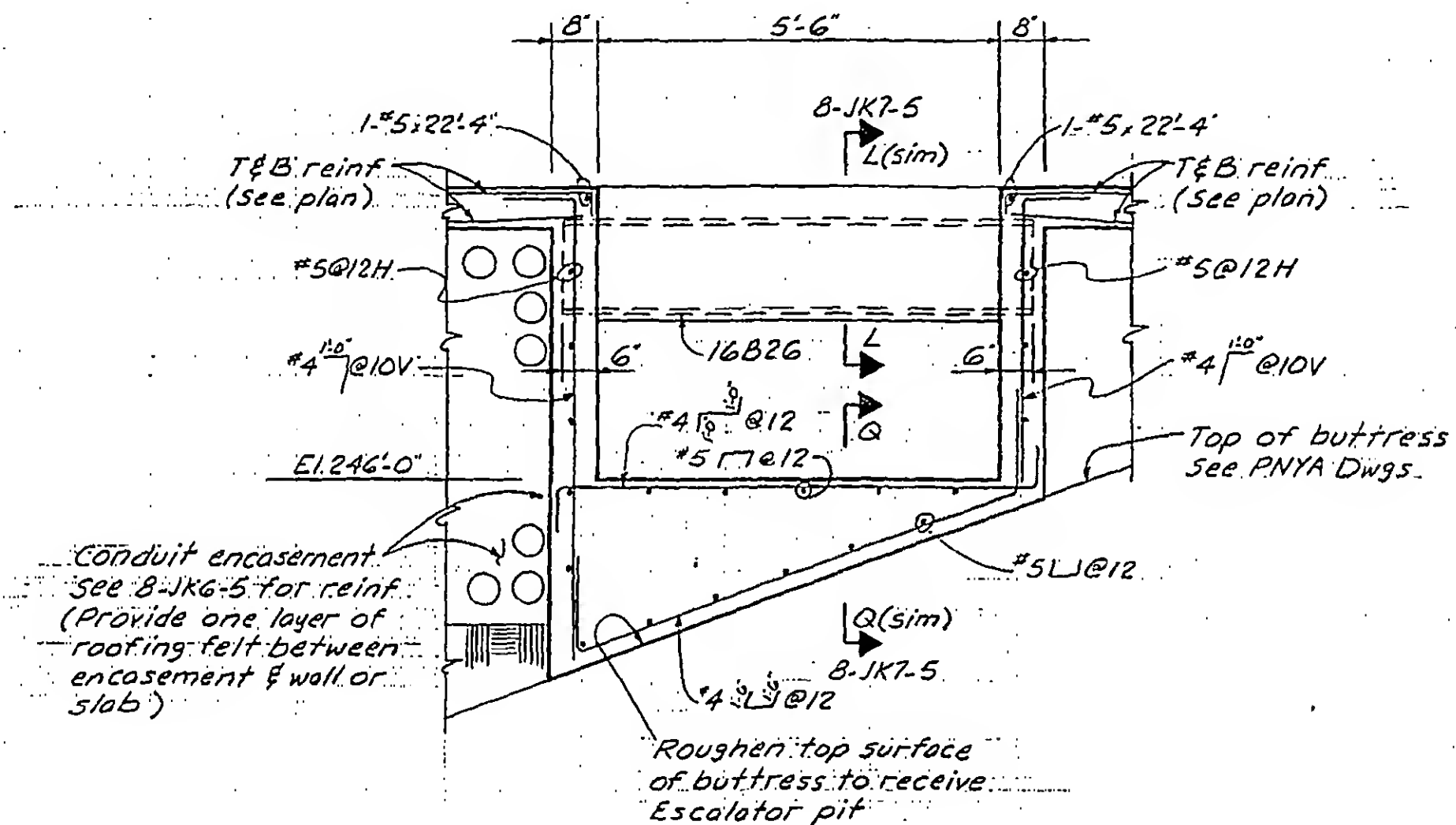
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 2-25-70

REVISIONS



SECTION V-V



DESIGNED K.H.

DRAWN A.L.F.

REVIEWED E.L.

1/2"=1'-0"

8-JK7-6.15

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

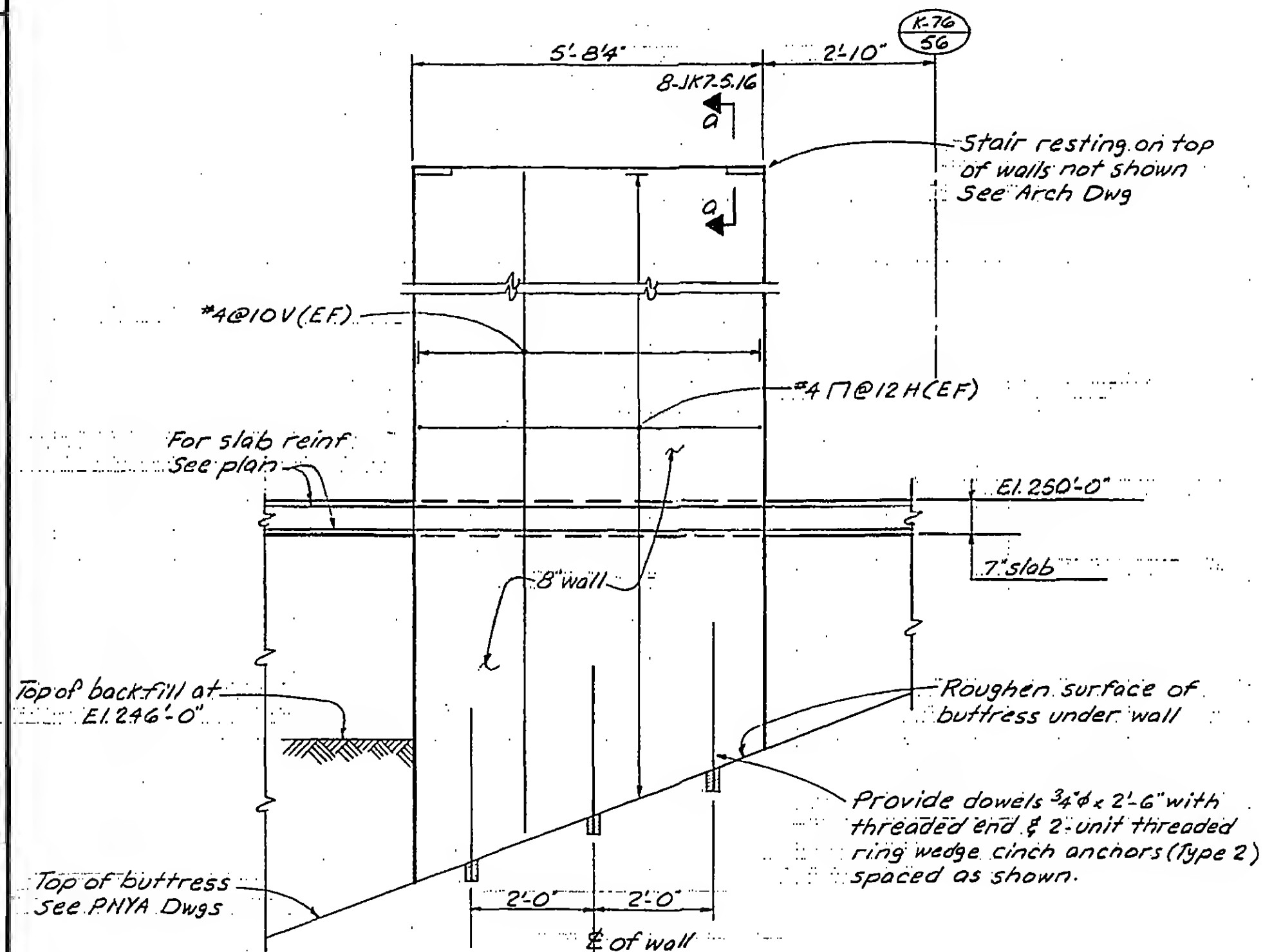
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 3-4-70

REVISIONS



SECTION W-W  
(1/2" = 1'-0")

Note:

Provide opng in 8" wall for duct bank (12 conduits)

DESIGNED  
K.H.DRAWN  
A.L.F.REVIEWED  
E.L.

8-JK7-6.16



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

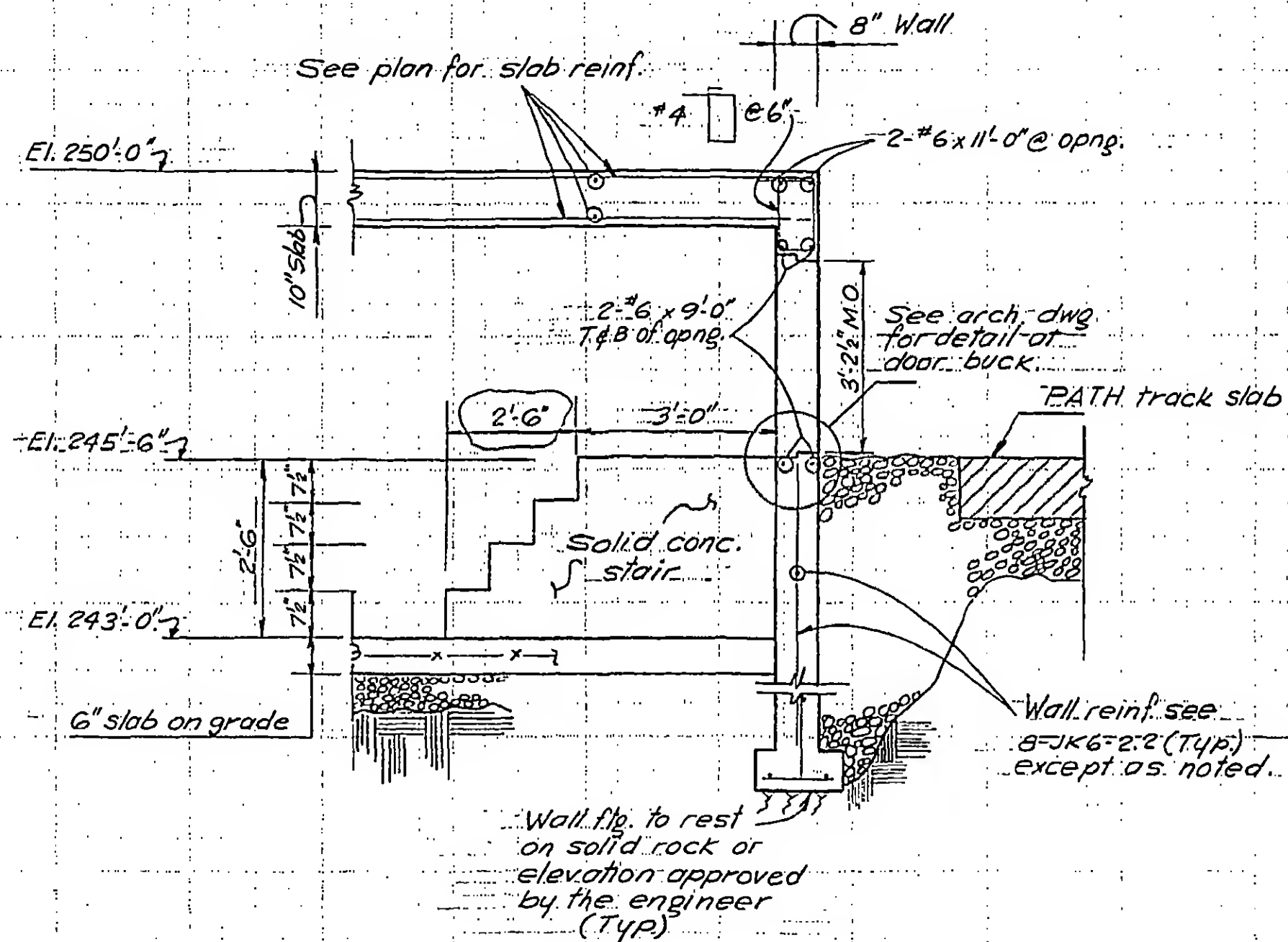
TITLE PATH SECTIONS

DATE 3-13-70

## REVISIONS

3-23-70

3-25-71



Section X-X

(1/2"=1'-0")



DESIGNED

DRAWN

V.H.A.

REVIEWED

K.H. &amp; E.L.

8-JK7-6.17

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

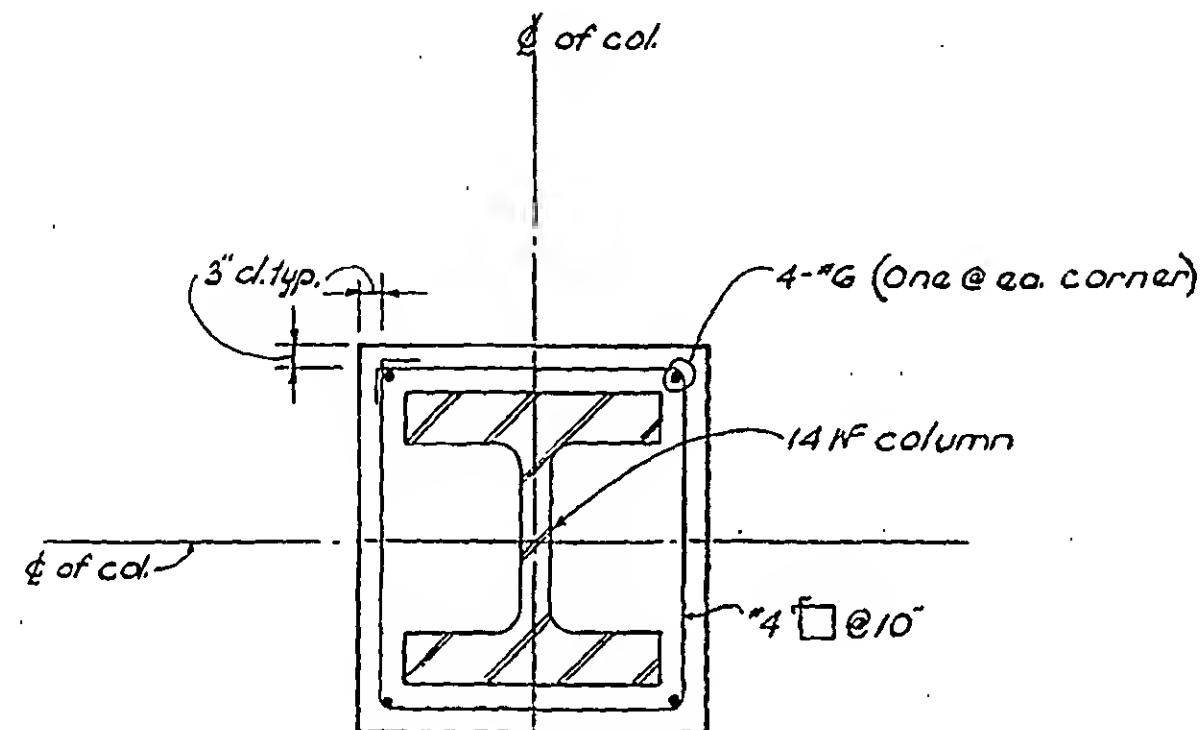
PROJECT THE WORLD TRADE CENTER

TITLE

PATH SECTIONS

DATE 3-13-70

REVISIONS

SECTION Y-Y (7'-1-0")

All reinf. shown are from  
top of ftg. to El. 250'-0"



DESIGNED

DRAWN

D. Huggins

REVIEWED

E.L.

8-1K7-G.12

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

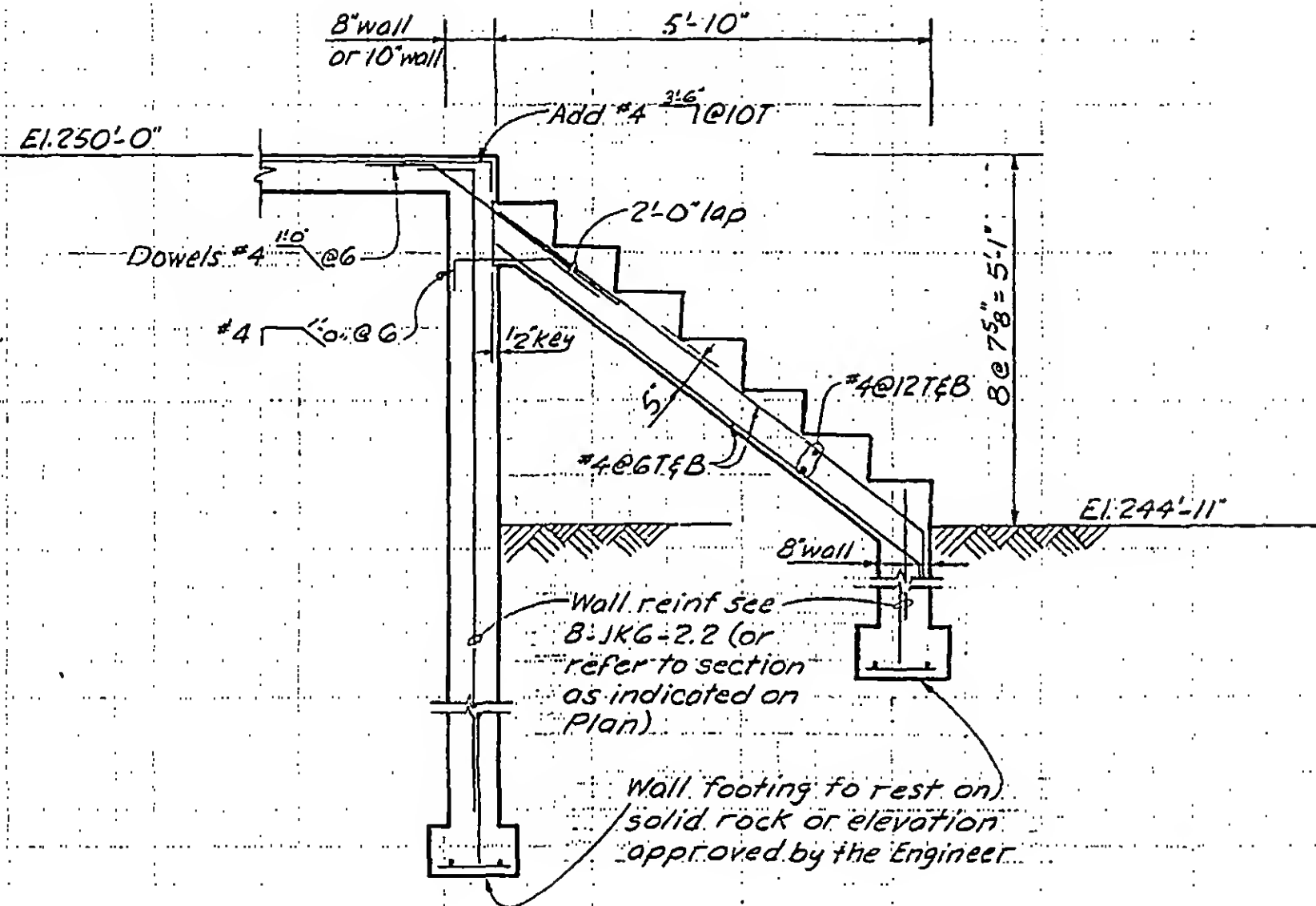
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE PATH SECTIONS

DATE 3-25-70

## REVISIONS



SECTION Z-Z

(1/2" = 1'-0")



DESIGNED

DRAWN  
A.F.REVIEWED  
E.L.

B-JK7-6.19

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

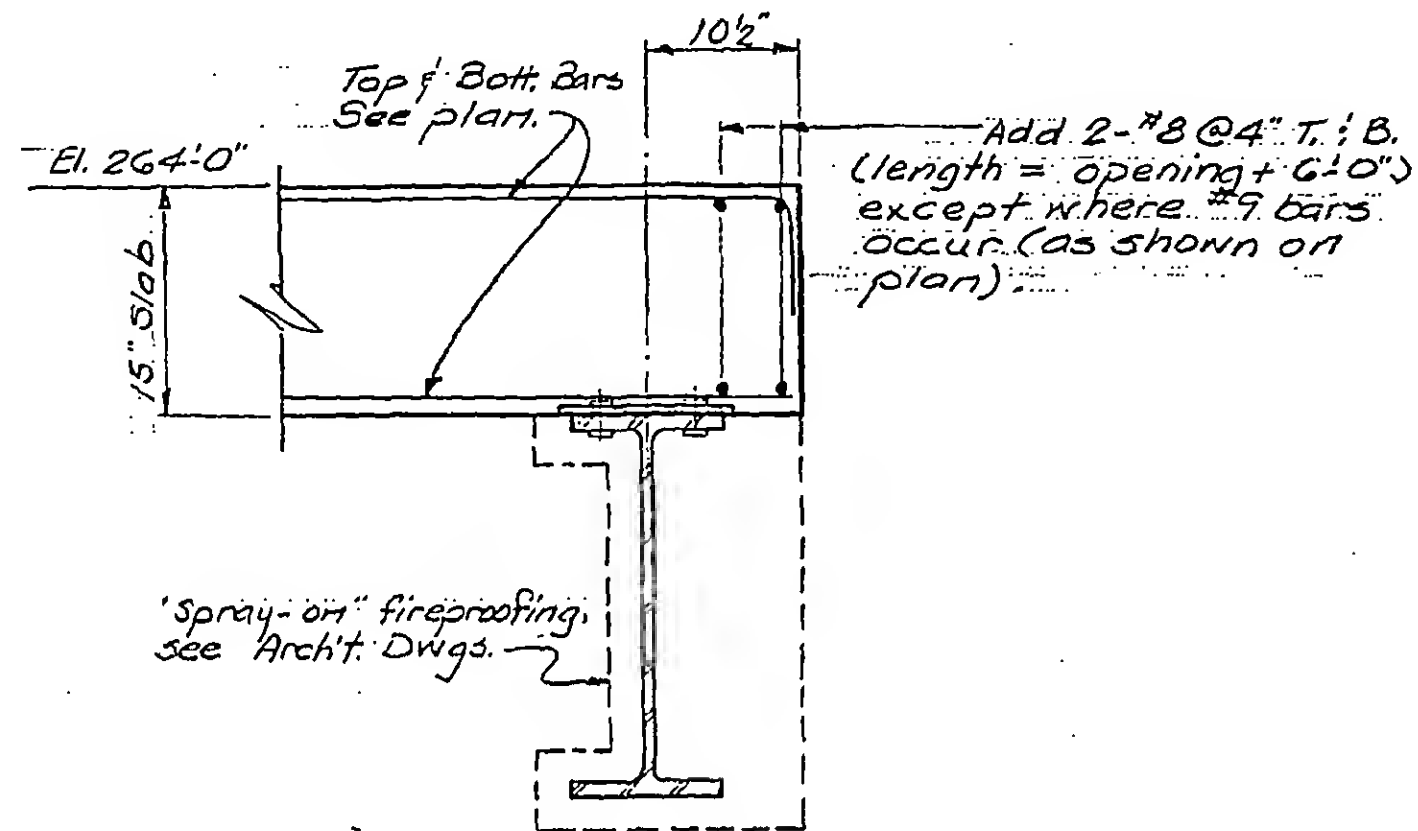
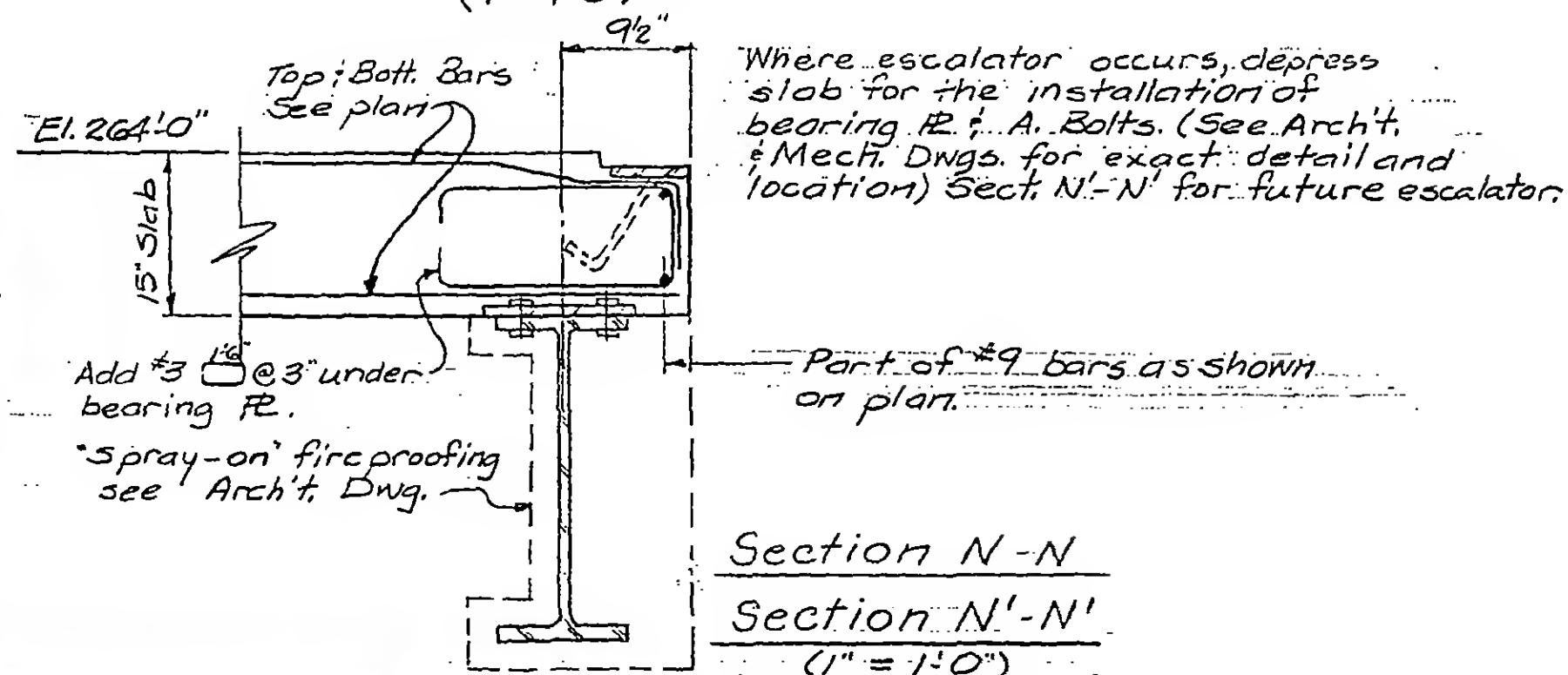
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTIONS AT EL. 264'

DATE 5-1-68

## REVISIONS

7/10/69 GEN.  
REV.Section M-M  
(1" = 1'-0")

Section N-N

Section N'-N'

(1" = 1'-0")



DESIGNED

DRAWN

G. STANTON

REVIEWED

E.L.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

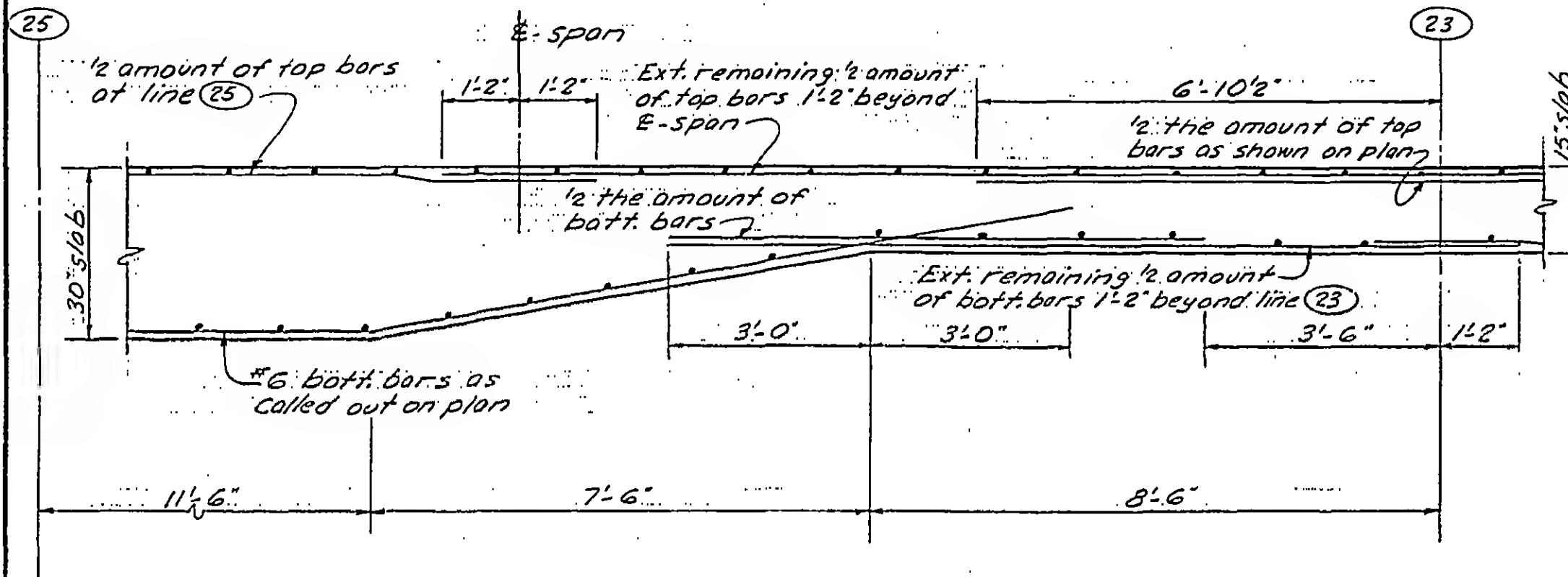
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTION AT EL. 264'

DATE 2.25-69

REVISIONS



Section P-P

DESIGNED  
E. L.DRAWN  
A. L. F.

REVIEWED

8-JK7-7.7

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT

THE WORLD TRADE CENTER

TITLE

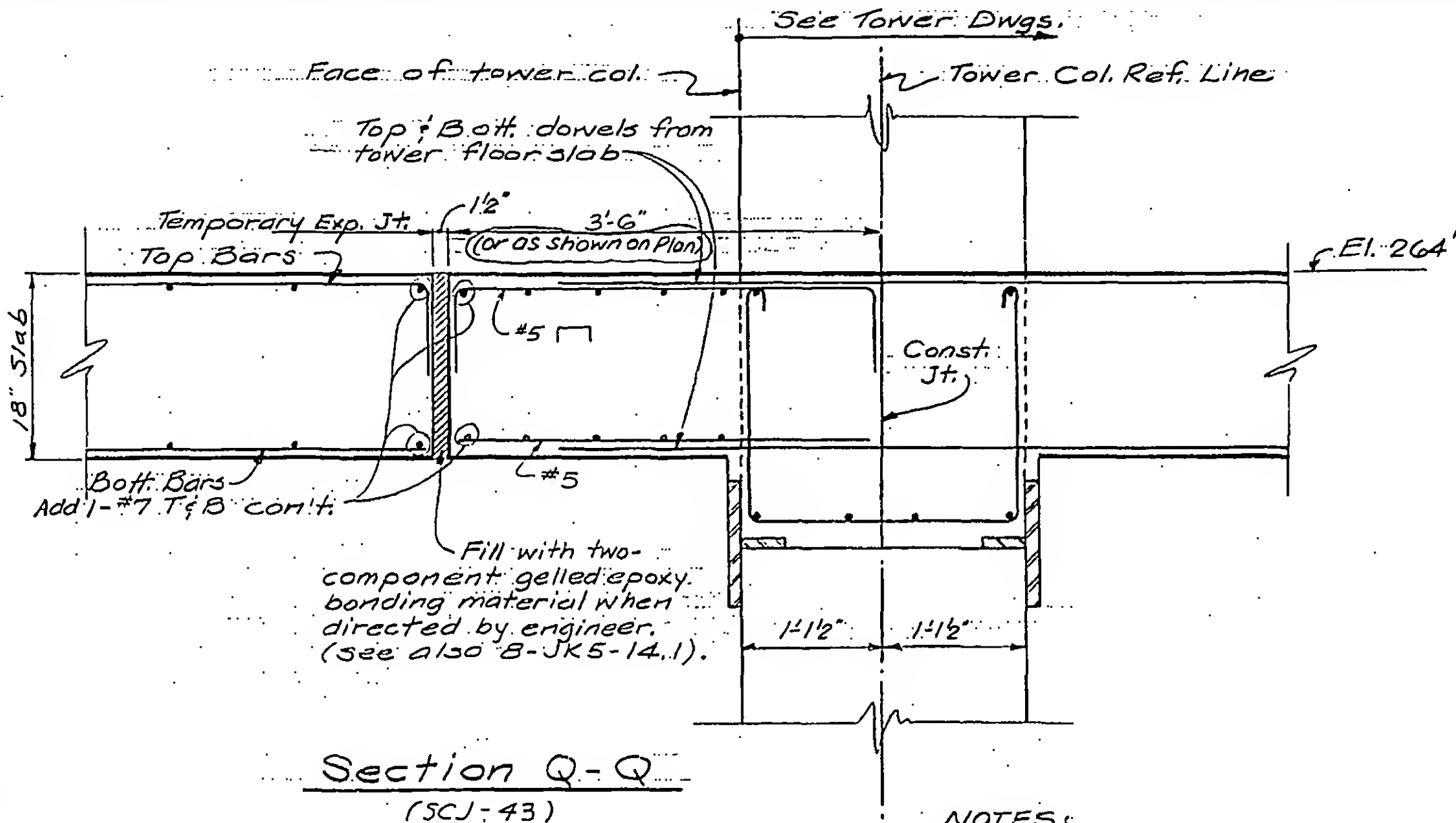
SECTION AT ELEV. 264'

DATE

4-2-69

REVISIONS

7-10-69



## NOTES:

1) See also B-JK5-14.1.



DESIGNED

DRAWN

G. J. S.

REVIEWED

E. L.

B-JK7-7.8

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural & Civil Engineers

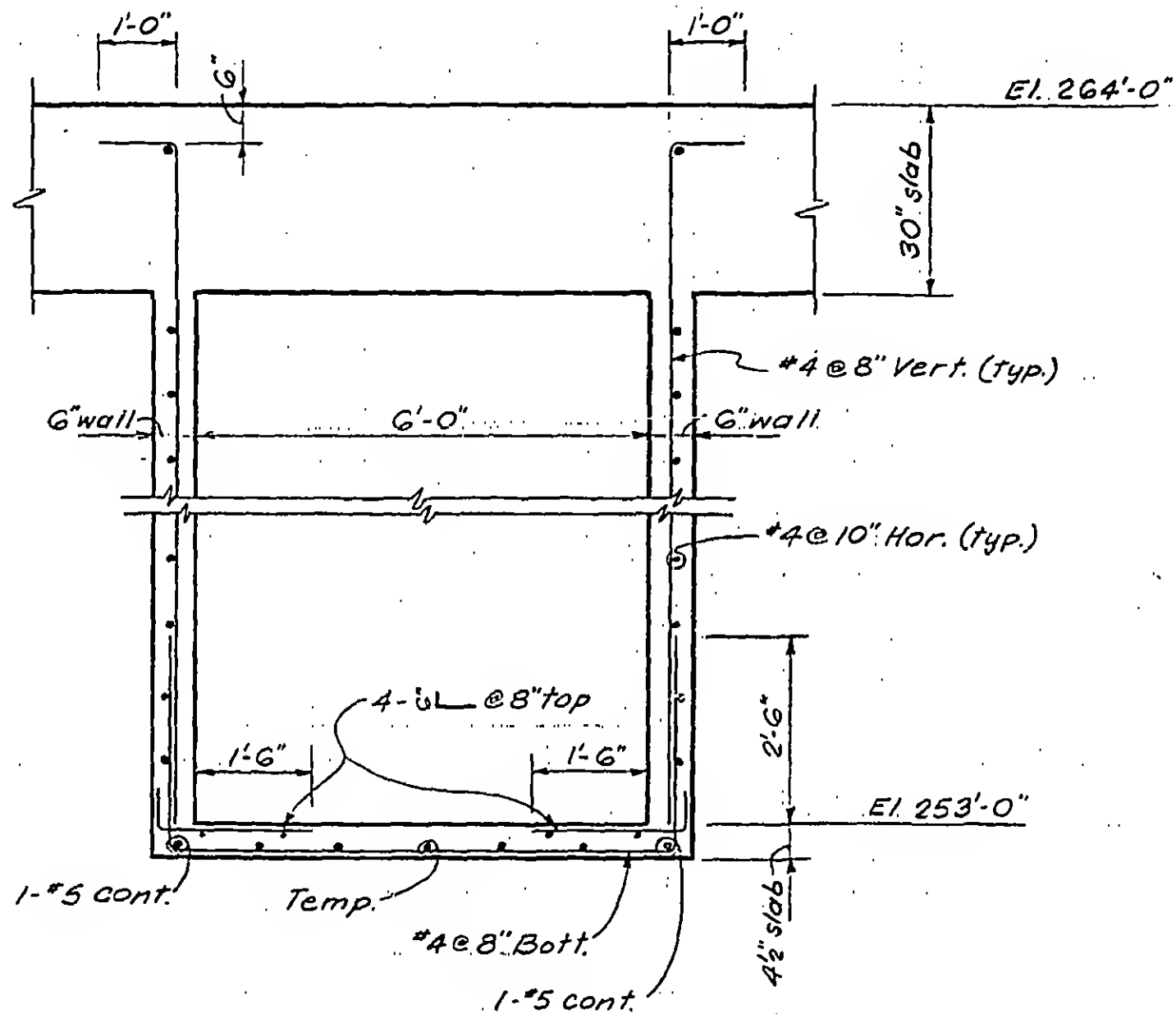
PROJECT: THE WORLD TRADE CENTER

TITLE

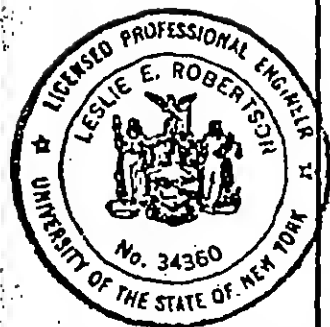
SECTION AT EL. 264'

DATE 4-9-69

REVISIONS



Section R-R  
(SCK-46)



DESIGNED

DRAWN

S.C.

REVIEWED

E.L.

8-JK7-7.9

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

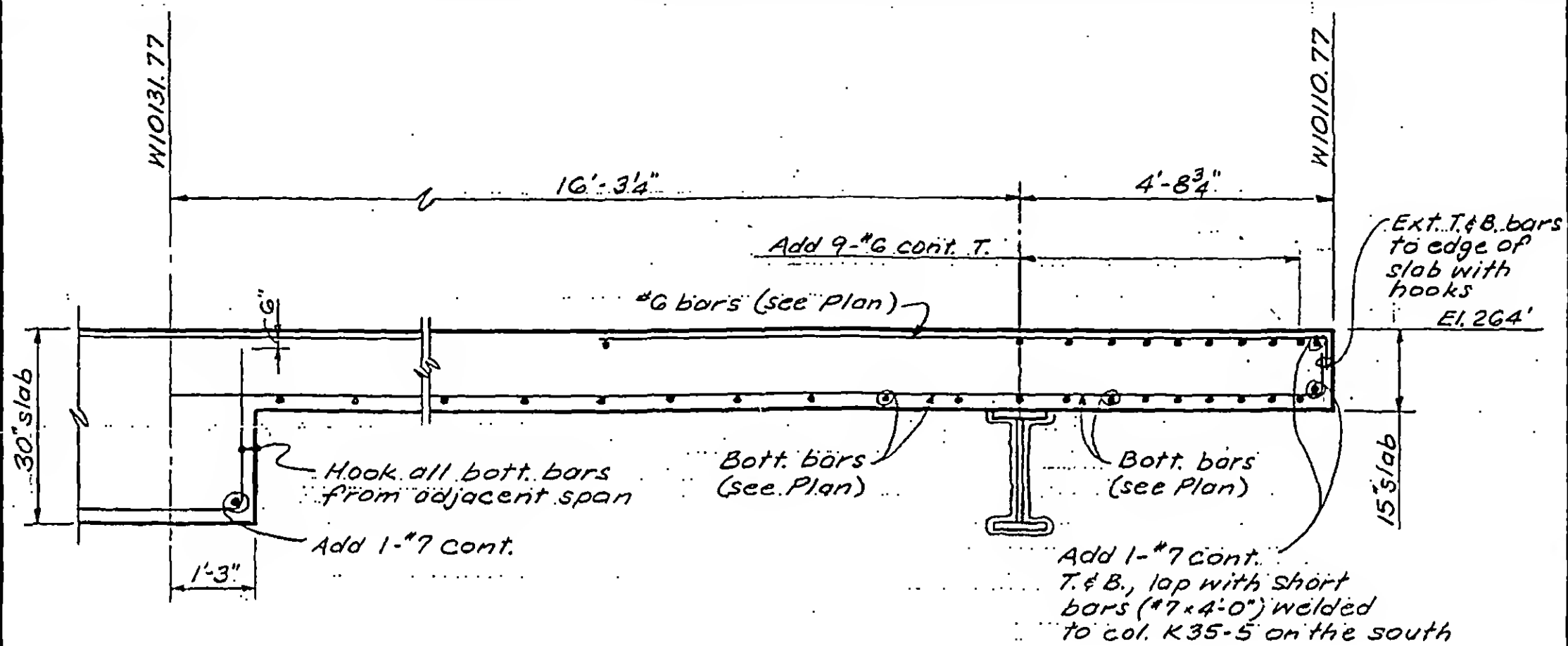
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTION AT EL. 264'

DATE 4-9-69

REVISIONS



Section S-S

(SCK-46)



DESIGNED

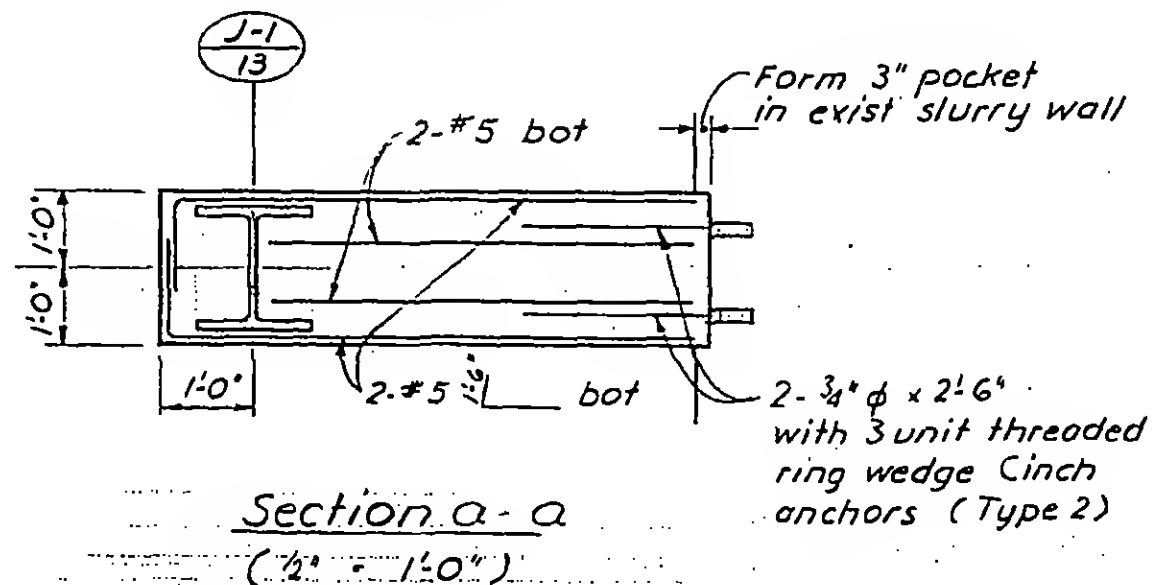
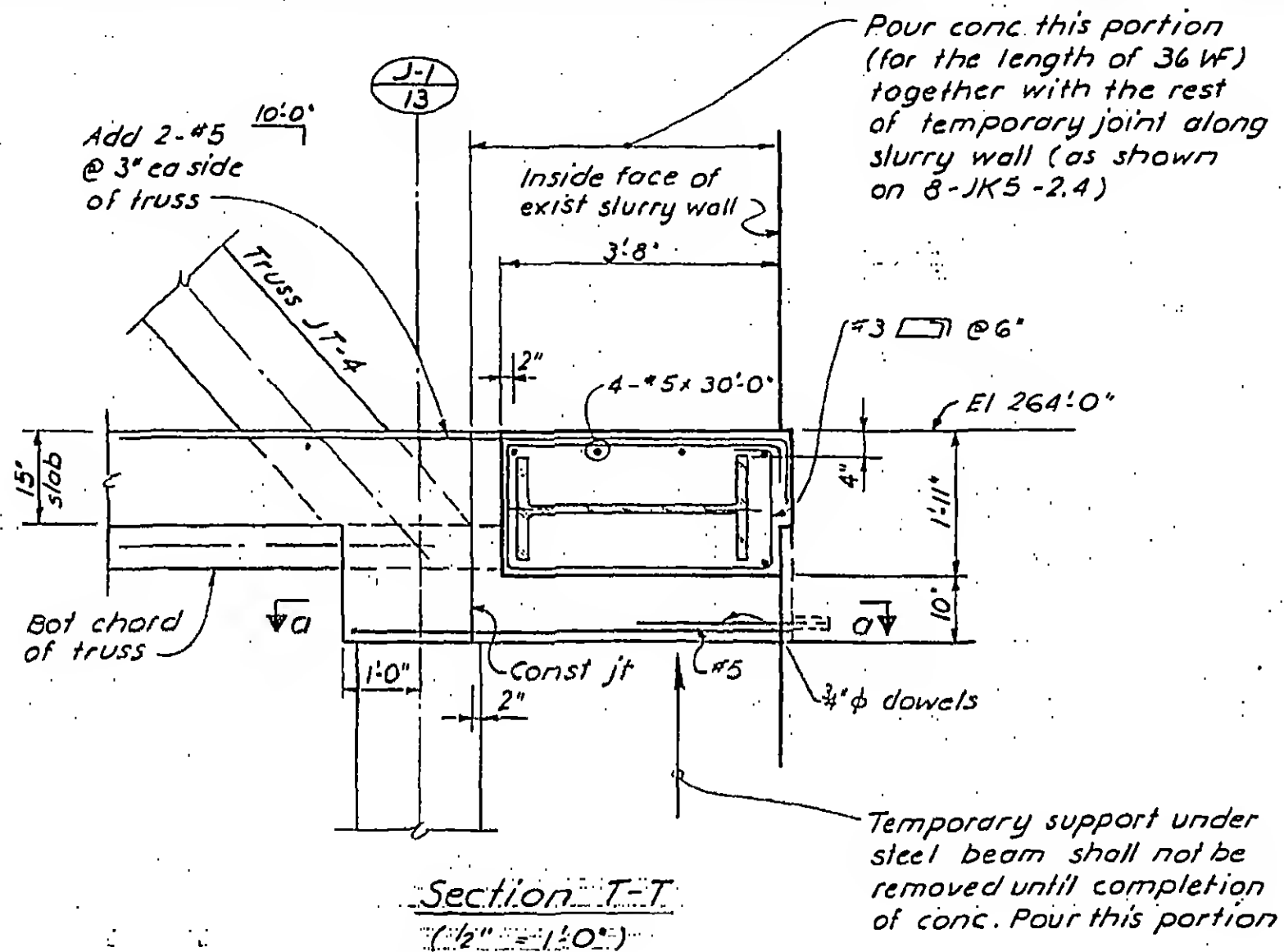
DRAWN S.C.

REVIEWED E.L.

8-JK7-7.10



## REVISIONS



DESIGNED

DRAWN  
F. Smith

REVIEWED

E.L.

8-JK7-7.11

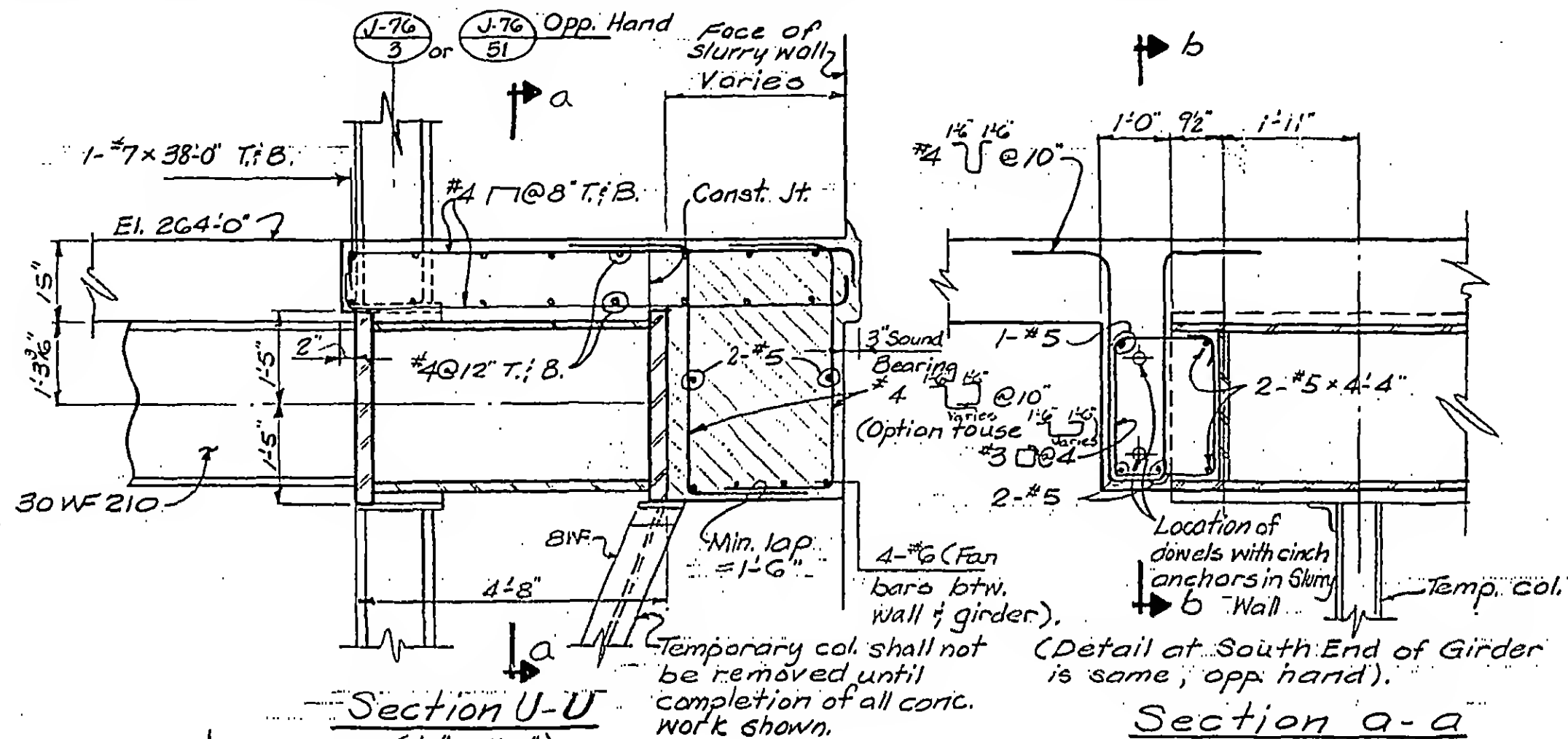
SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER TITLE SECTIONS AT EL. 264'-0"

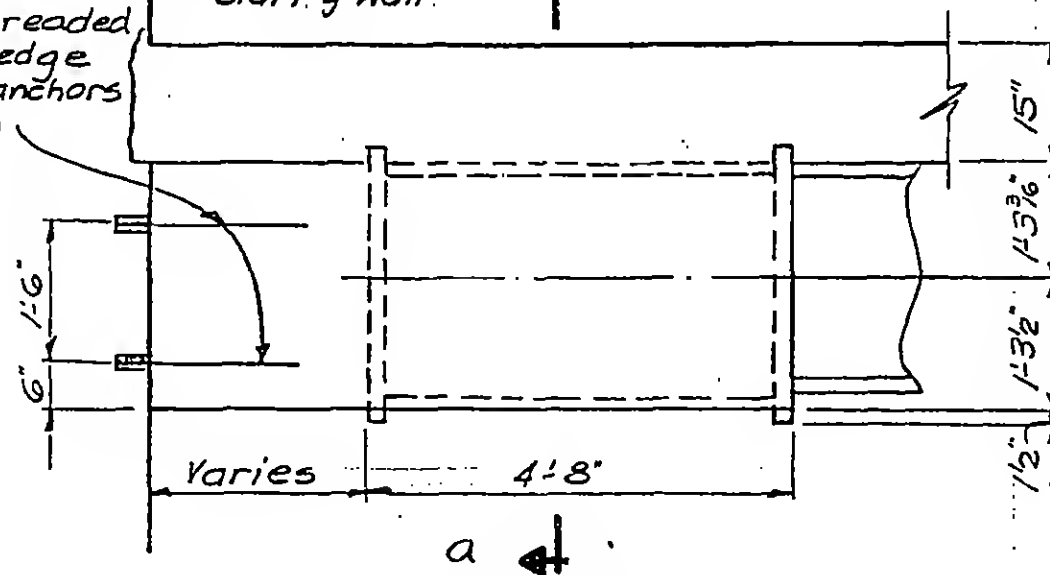
DATE 7/10/69

## REVISIONS



2-#8  $\phi$  x 3'-0" dowels with 3 unit threaded ring wedge cinch anchors (Type 2)

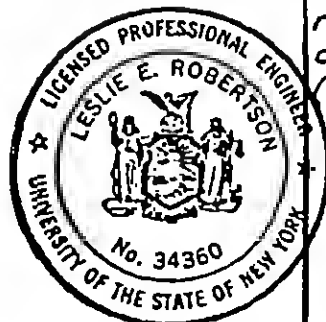
2 Face of slurry wall



Section b-b (1/2" = 1'-0")

## NOTES:

- 1.) All concrete to have  $f'_c = 4000$  psi.
- 2.) Shaded area shall be poured together with the joint btw. floor and slurry wall as shown on Detail 8-JK5-24. Contractors option to pour this whole area over top of steel girder at a later stage.
- 3.) See 8-JK5-2.4 for further notes referring keys cut in slurry wall.



DESIGNED

DRAWN  
G. STANTONREVIEWED  
E.L.

8-JK7-7.12

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

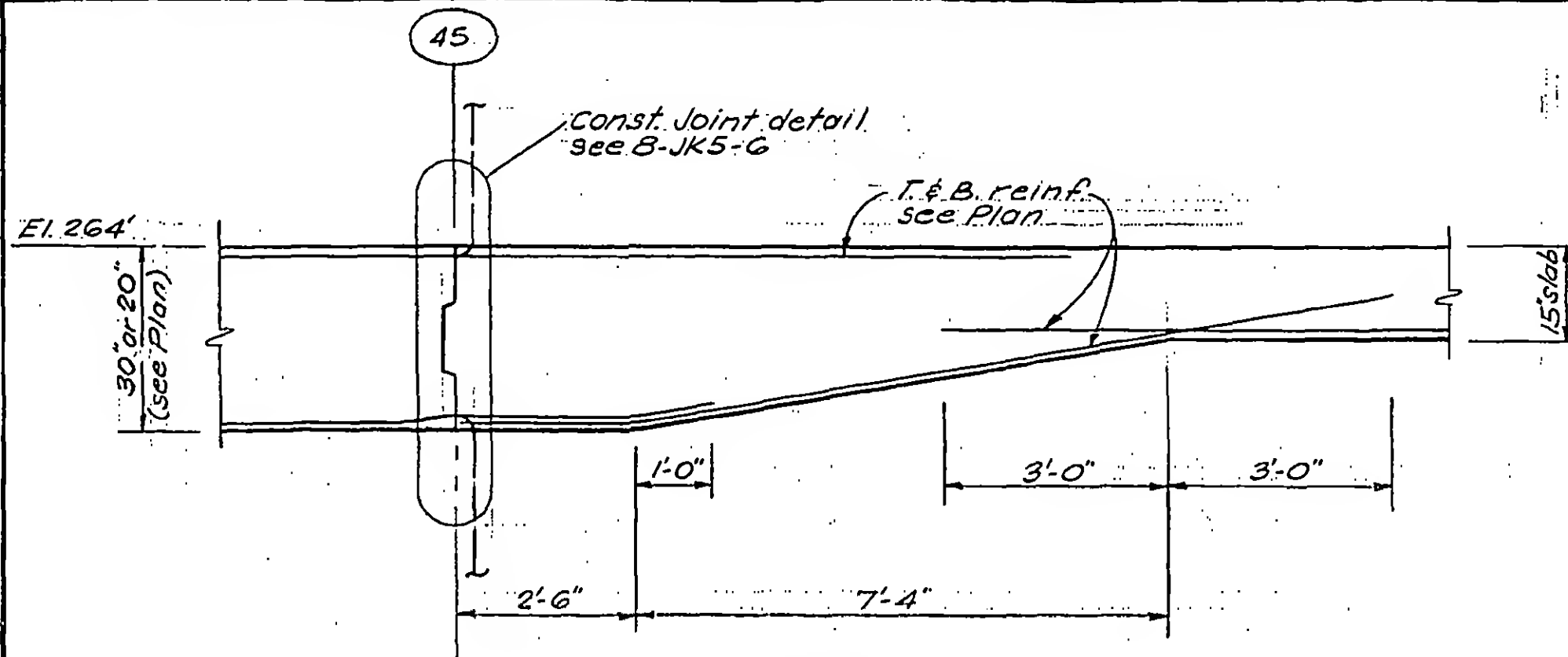
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTIONS AT EL. 264'-0"

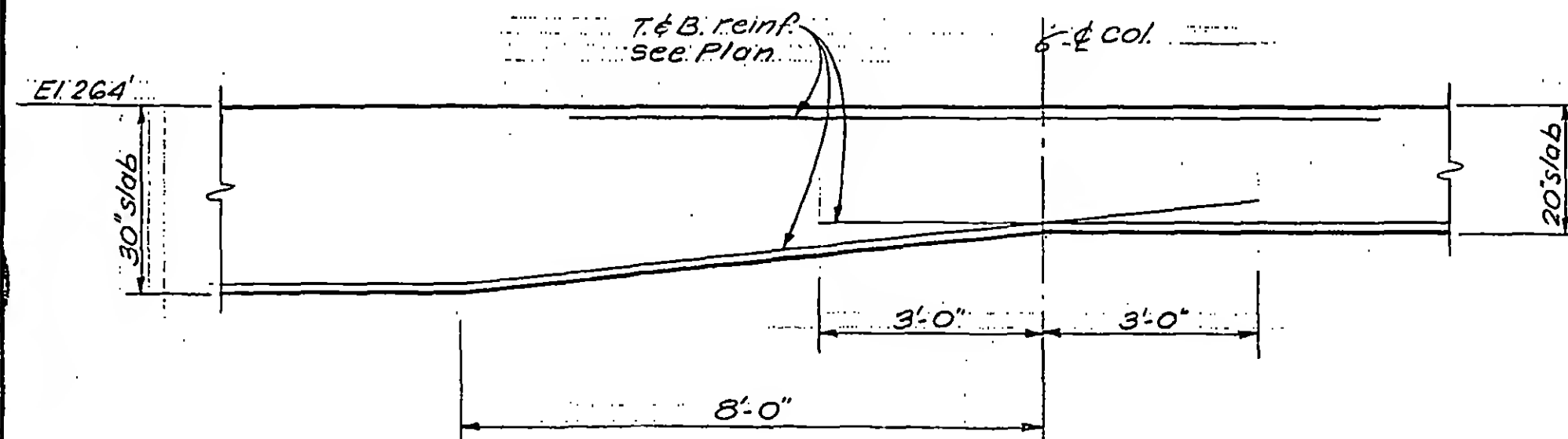
DATE 8-13-69

REVISIONS



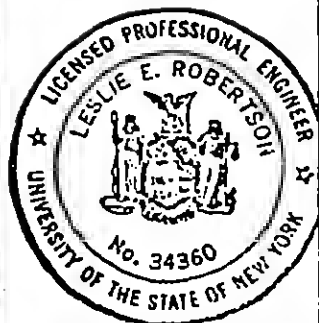
Section V-V

(1/2" = 1'-0")



Section W-W

(1/2" = 1'-0")



DESIGNED

DRAWN  
S.C.REVIEWED  
E.L.

8-JK7-7.13

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

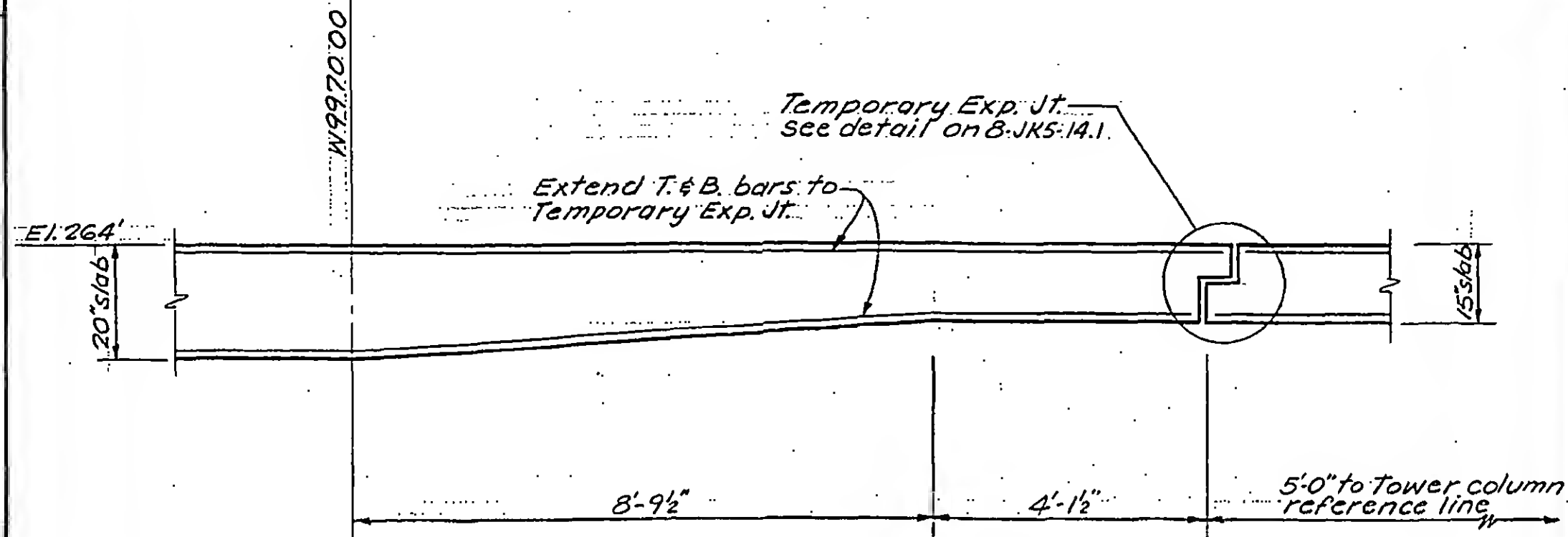
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTION AT EL. 264'-0"

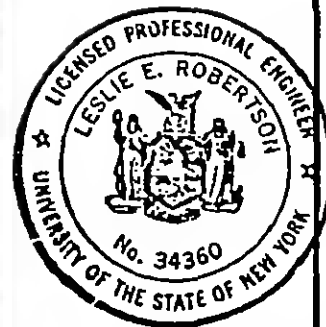
DATE 8-13-69

REVISIONS



Section X-X

(1/2" = 1'-0")



DESIGNED

DRAWN  
S.C.

REVIEWED  
E.L.

8-JK7-7.14

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

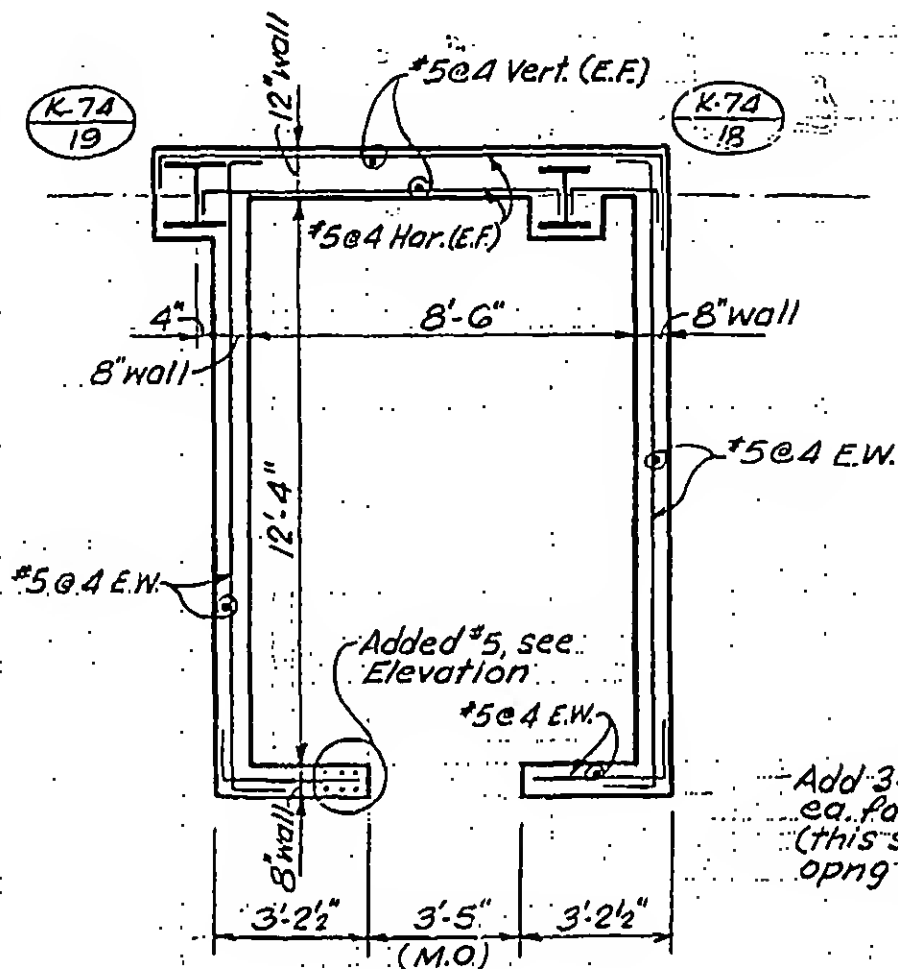
PROJECT THE WORLD TRADE CENTER

TITLE

EL. 264 — COIN VAULT

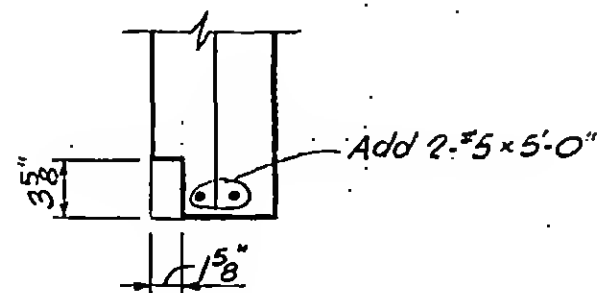
DATE 4-8-70

## REVISIONS



PLAN

(1/4" = 1'-0")

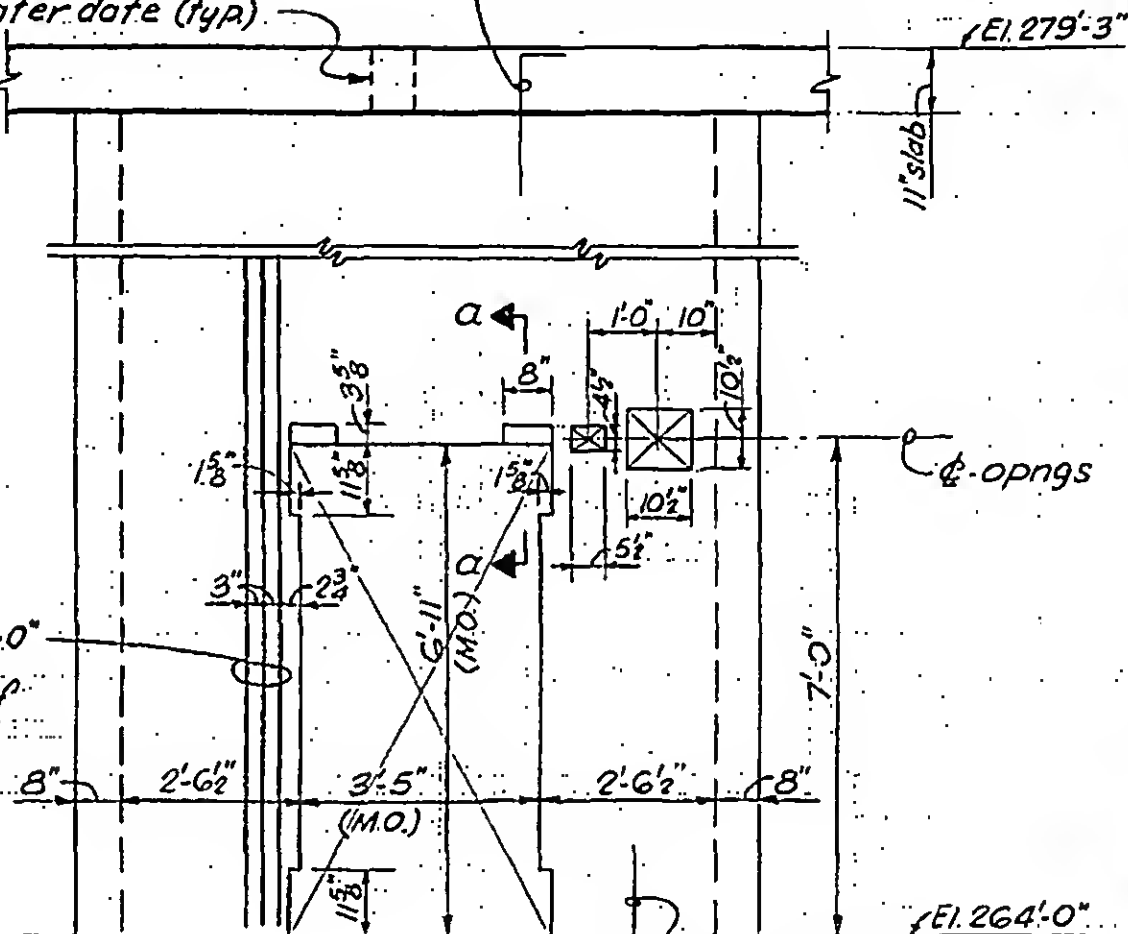


SECTION a-a

(1" = 1'-0")

Provide pour-holes in slab to allow construction of vault walls at a later date (typ).

Provide #5 in slab at El. 279'-3" to lap vert. bars in walls (location & spacing to match wall reinf.) (typical all four walls)



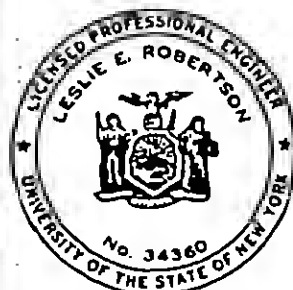
FRONT ELEVATION

(3/8" = 1'-0")

Provide 3/4" x 2'-6" dowels with 2-unit threaded ring wedge cinch anchors (type 2) @ 2'-0" o.c. typical at E of all four walls.

## NOTES:

- Refer to the following Dwg. for additional provisions for other trades:
  - PNYA Dwg HT-452 (2-10-70)
  - Holmes Electric Protective Co. Dwg S-5219 & S-5220 (2-9-70)
- All concrete - f'c = 3000 psi



DESIGNED

DRAWN

S.C.

REVIEWED

E.L.

8-JK7-7.15

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

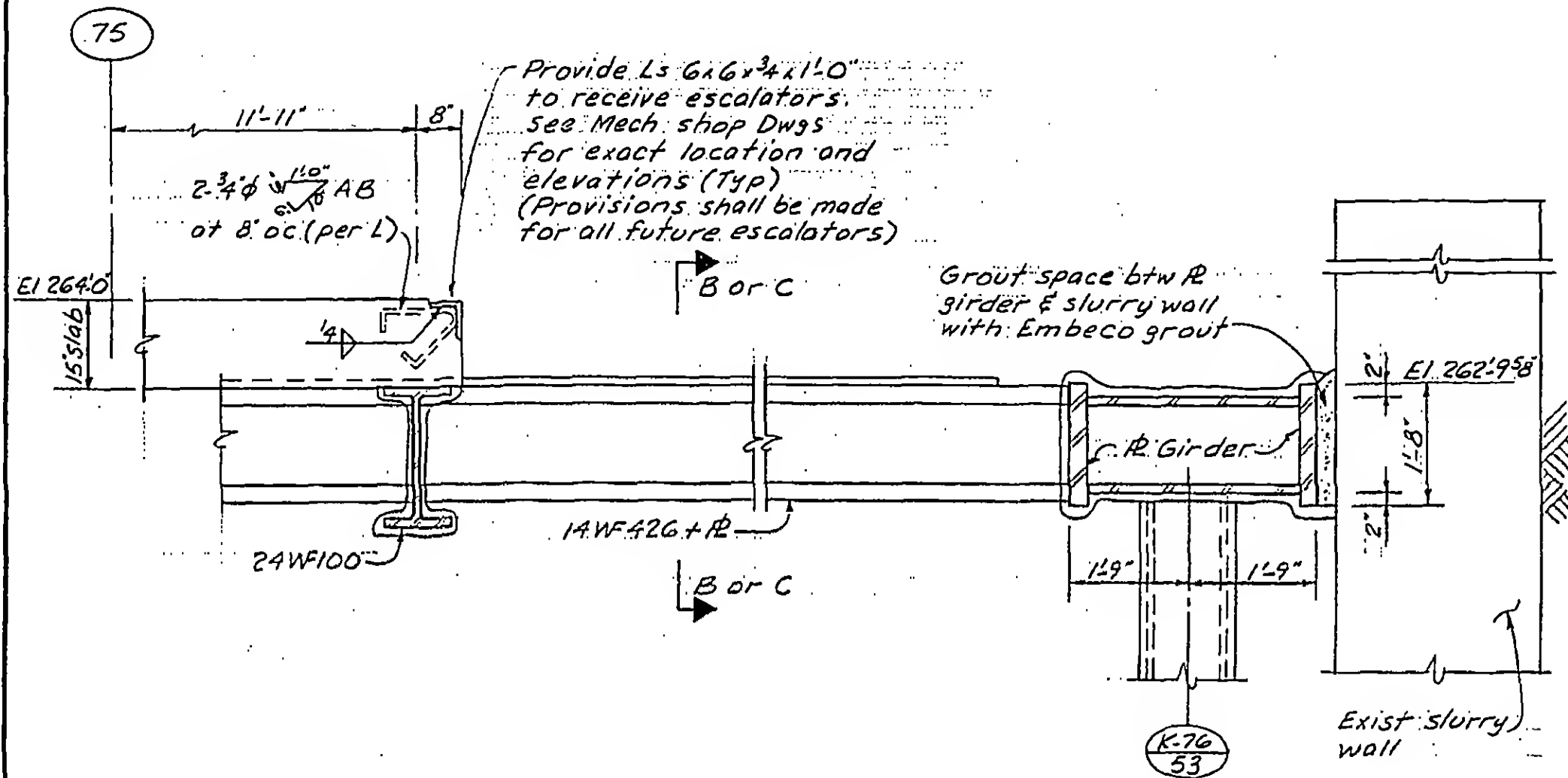
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTION AT EL 264'-0"

DATE 9-17-69

REVISIONS



Section A-A  
(1/2" = 1'-0")

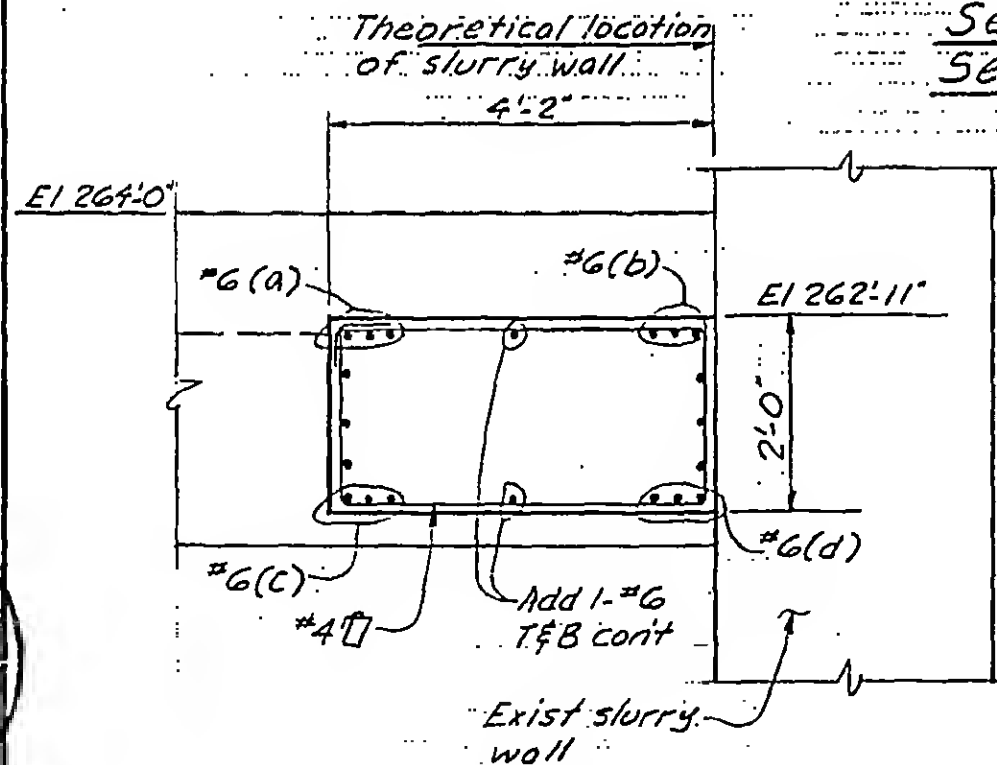
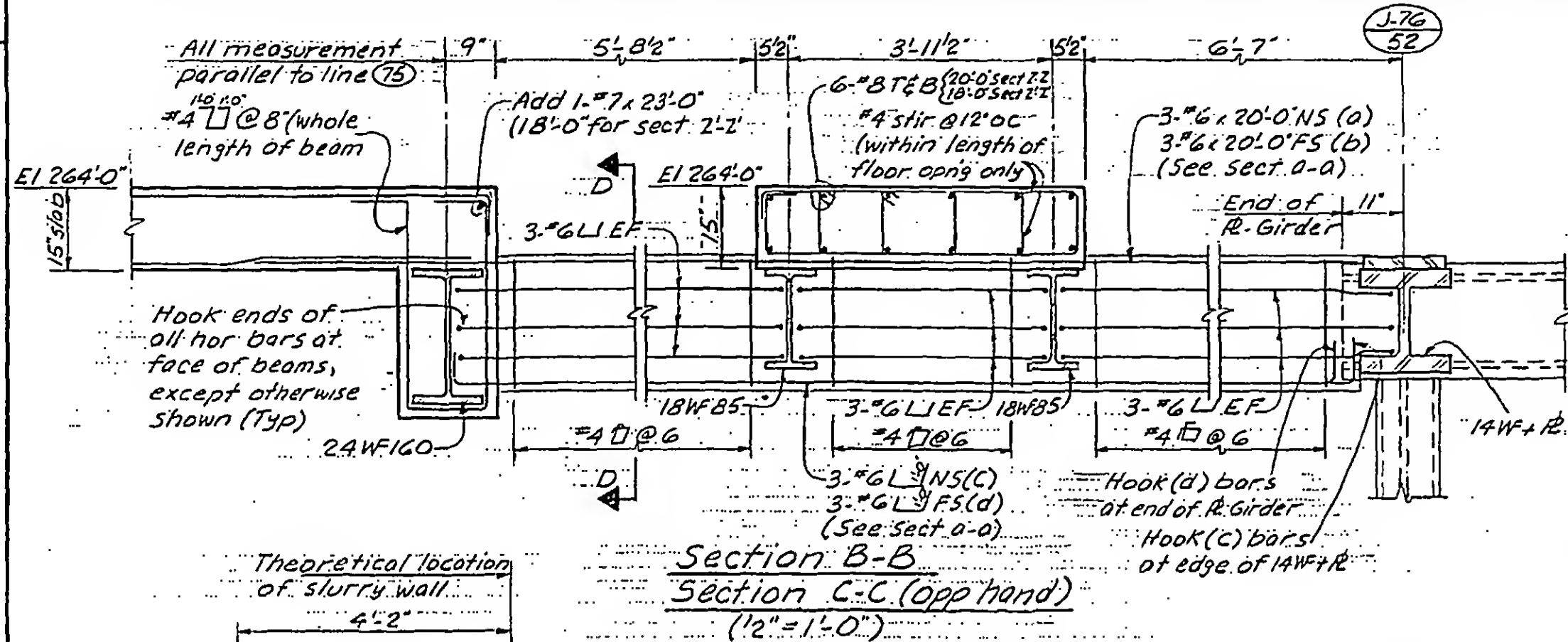


DESIGNED

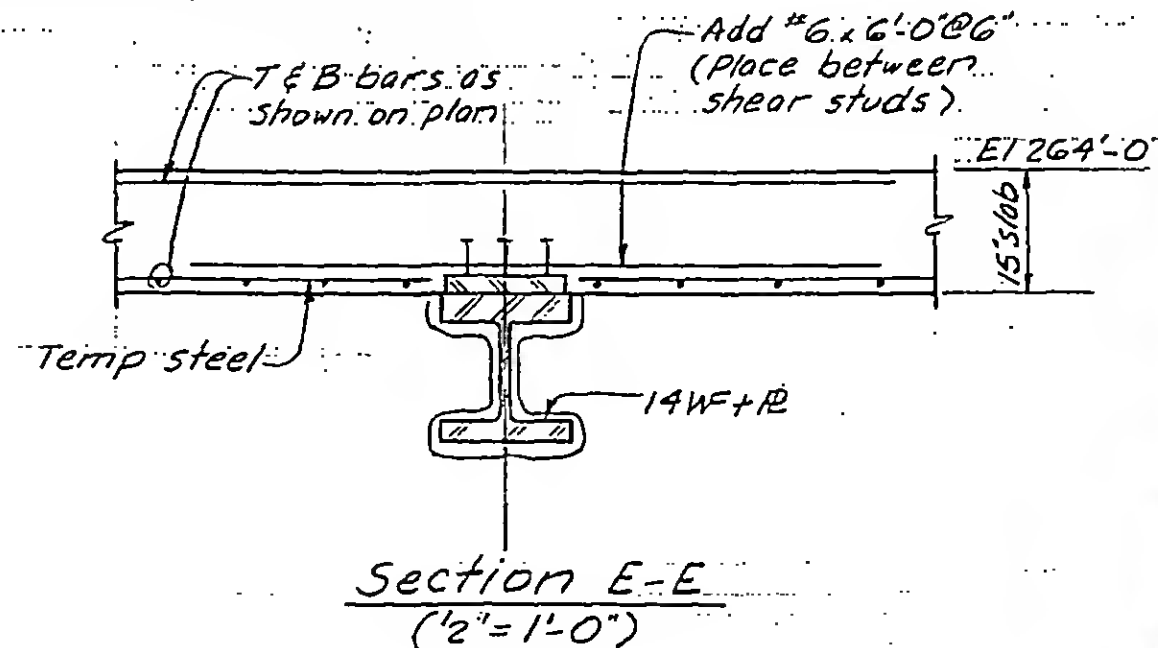
DRAWN  
A.F.REVIEWED  
E.L.

8-JK7-8.1

## REVISIONS



Section D-D  
(1/2" = 1'-0")



Section E-E  
(1/2" = 1'-0")



DESIGNED

DRAWN  
A.F.

REVIEWED  
E.L.

8-JK7-8.2

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

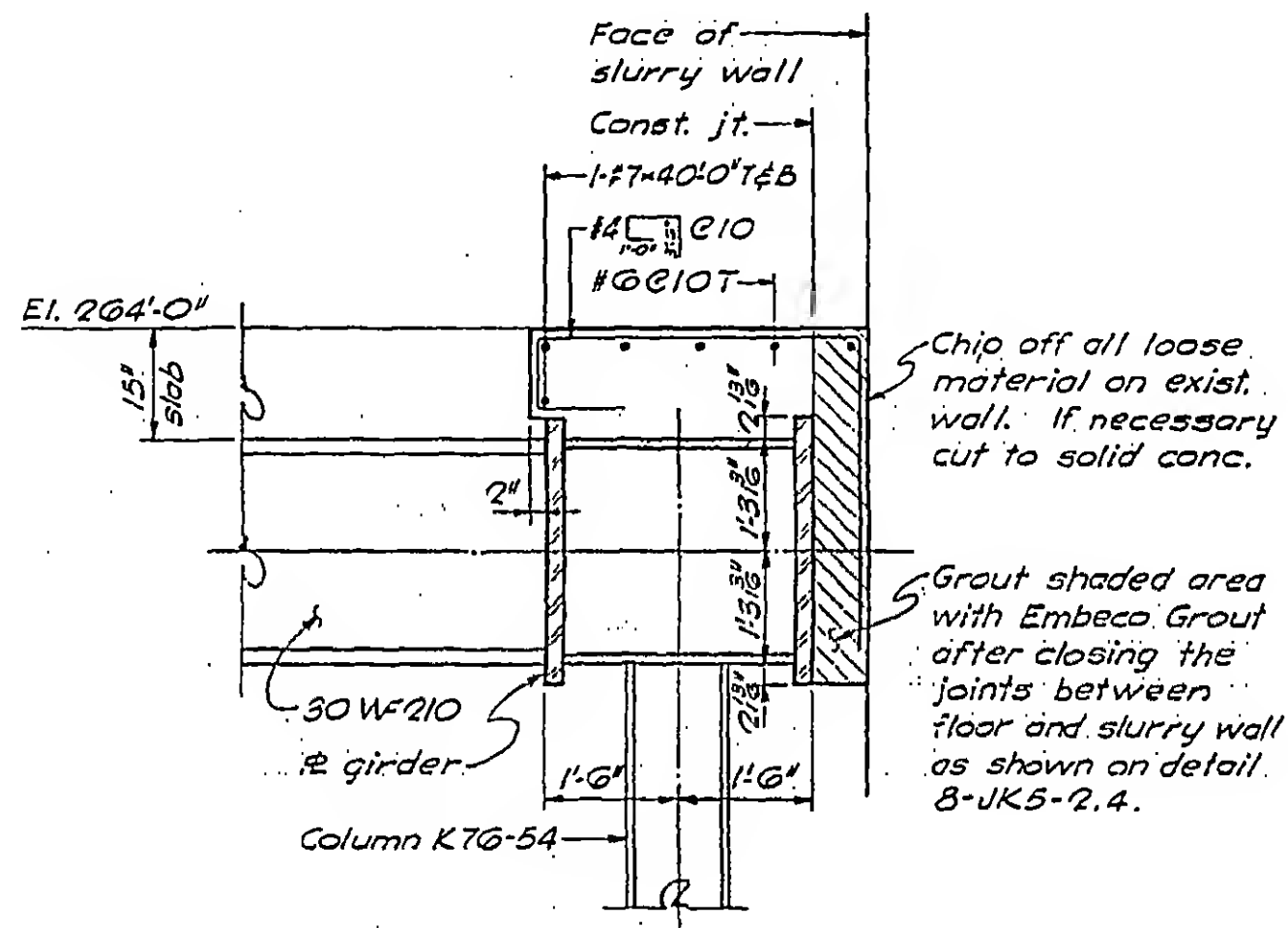
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

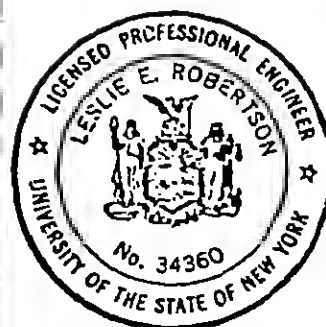
TITLE SECTION AT EL. 264'-0"

DATE 11-5-69

## REVISIONS



SECTION F-F  
(1/2" = 1'-0")



DESIGNED

DRAWN

G.K.

REVIEWED

E.L.

8-JK7-8.3



SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

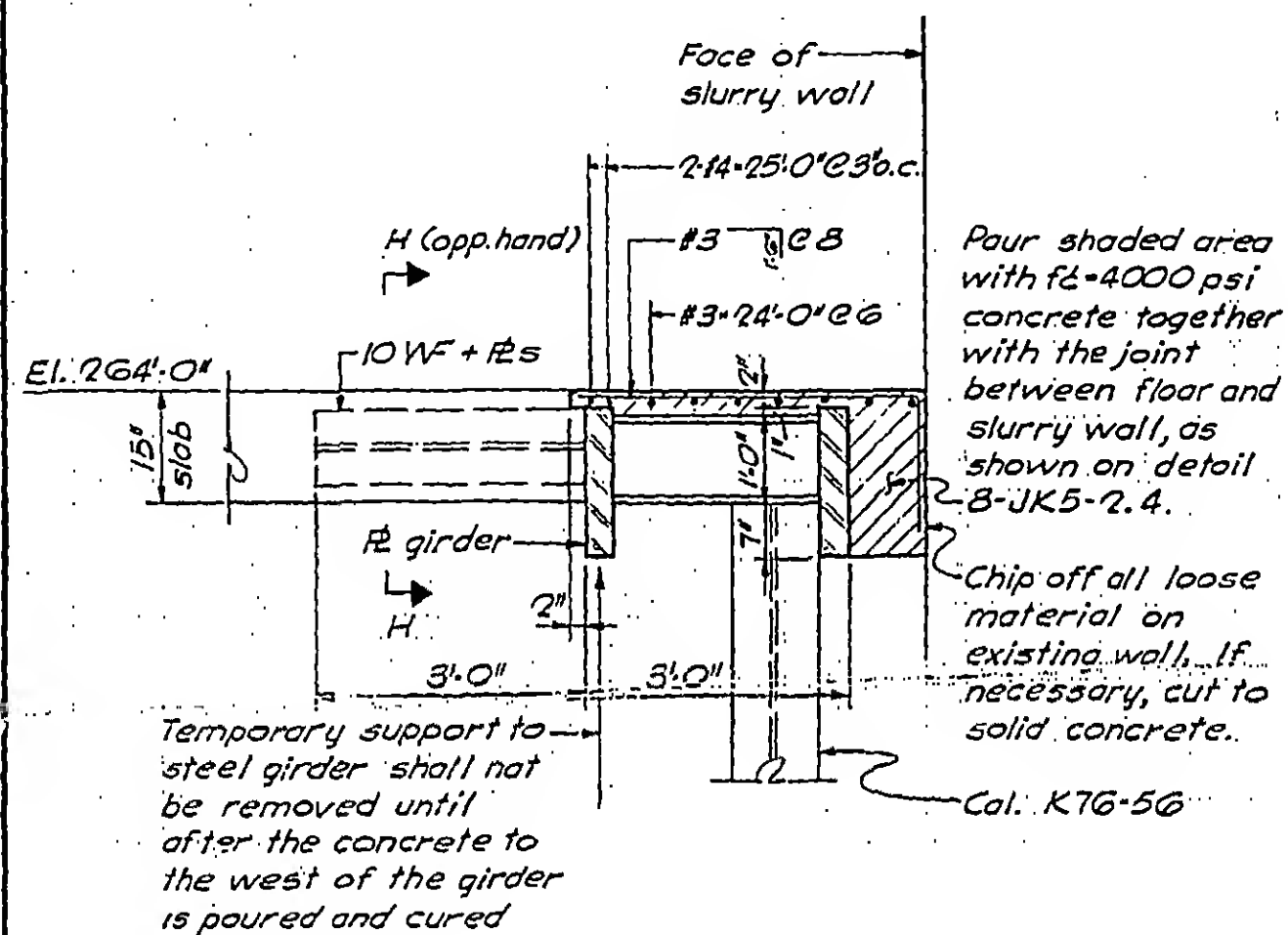
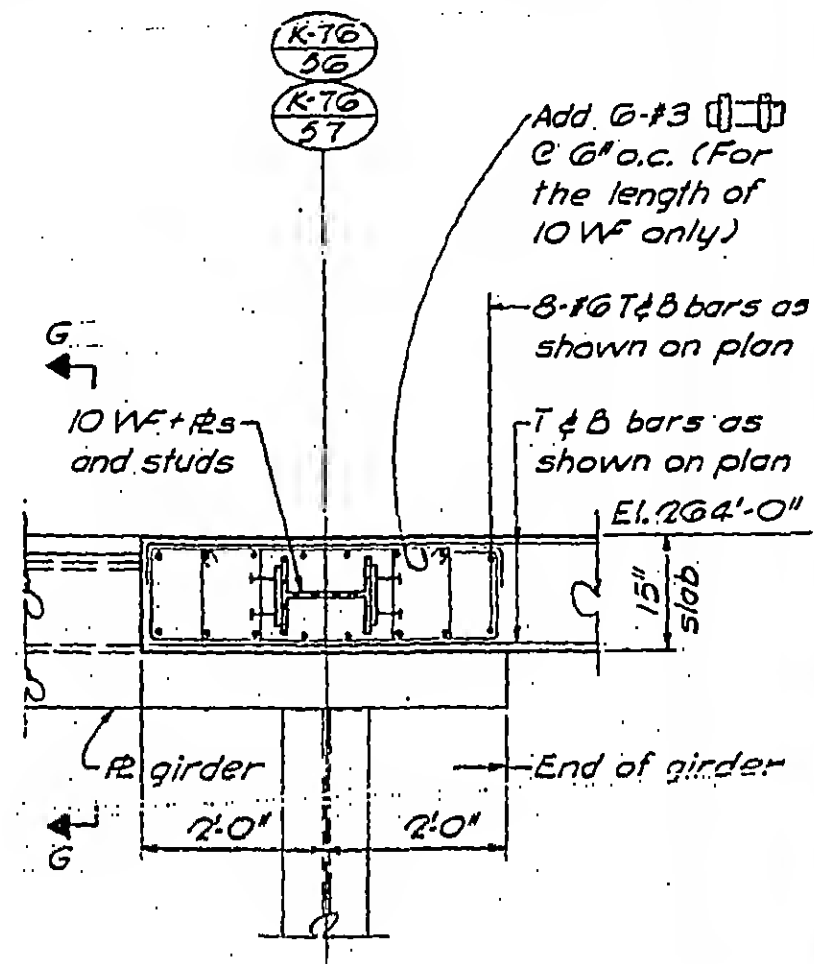
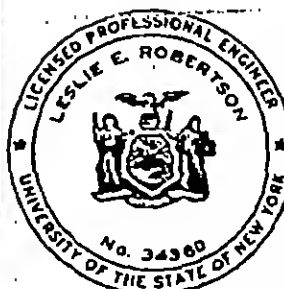
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTION AT EL. 264'-0"

DATE 11-5-69

## REVISIONS

SECTION G-G  
(1/2" = 1'-0")SECTION H-H  
(1/2" = 1'-0")

DESIGNED

DRAWN  
G. K.REVIEWED  
E. L.

8-JK7-8.4

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

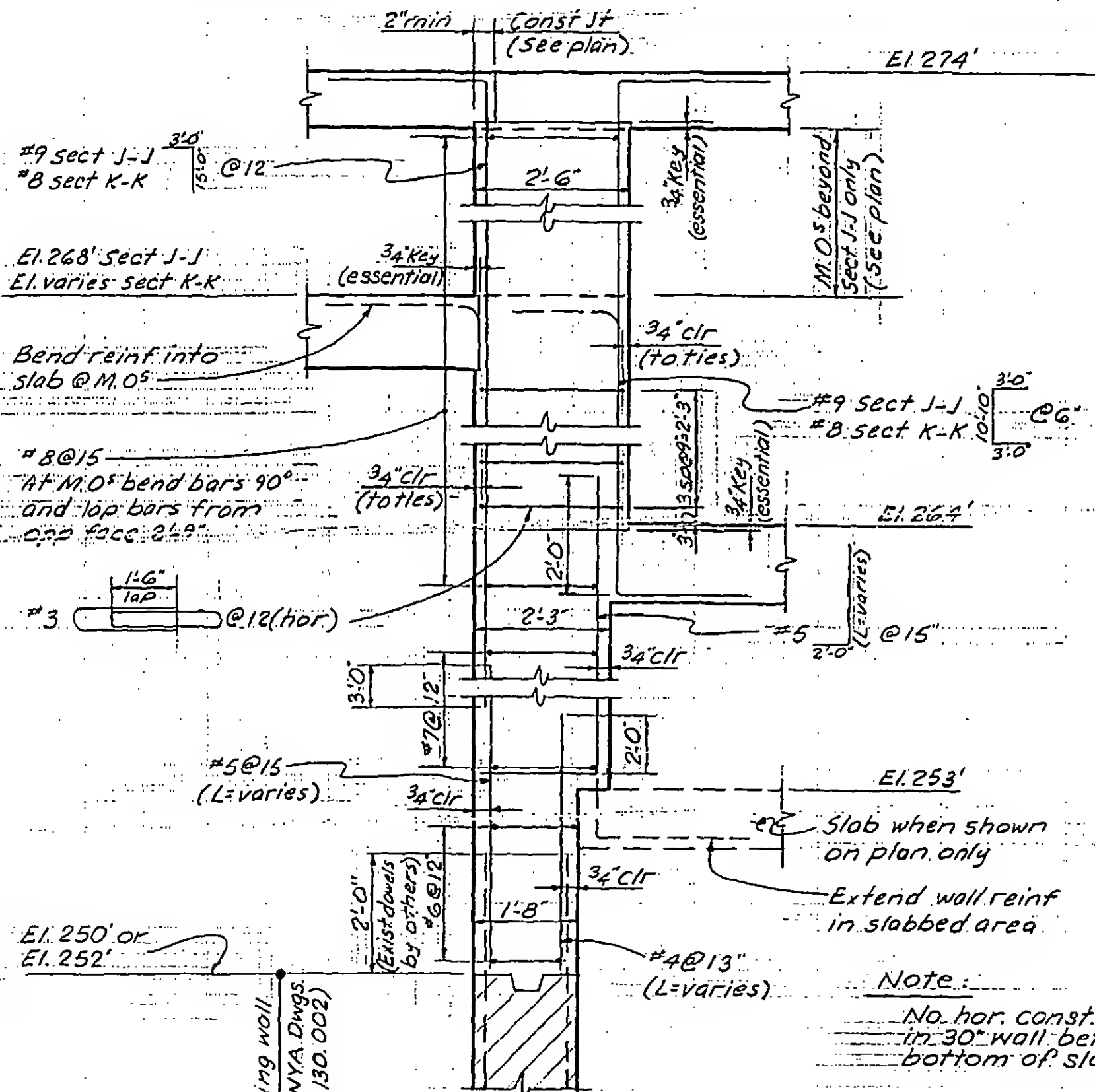
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTIONS AT EL. 264'-0"

DATE 2-25-70

## REVISIONS



## Note:

No hor. const. Jts. are permitted in 30" wall between El. 264 and bottom of slab at El. 274.

SECTION J-J

SECTION K-K

1/2" = 1'-0"

8-JK7-8.5

DESIGNED  
T. O'NEILLDRAWN  
A. FRANQUIREVIEWED  
E.L.

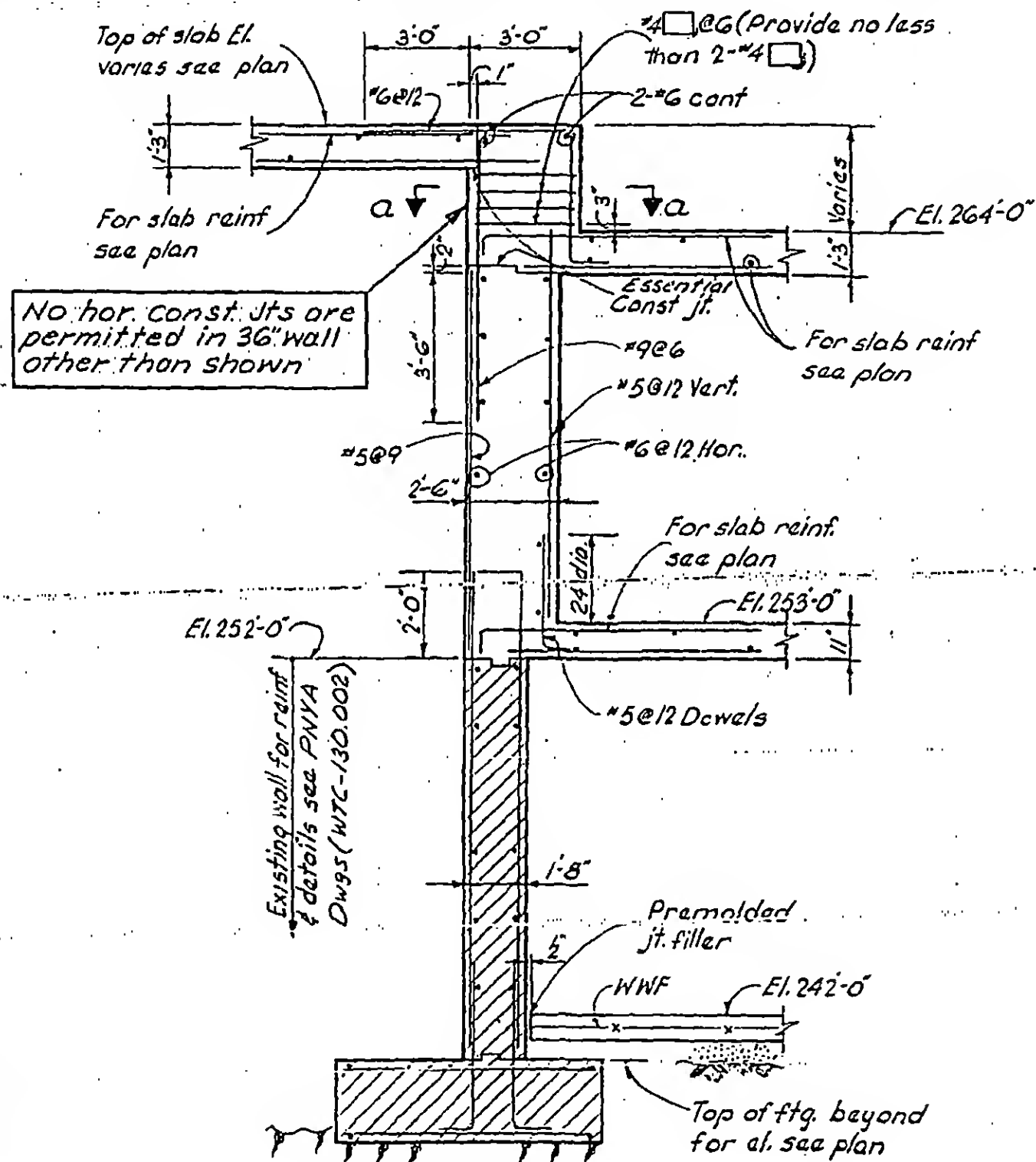
## Structural & Civil Engineers

[illegible]

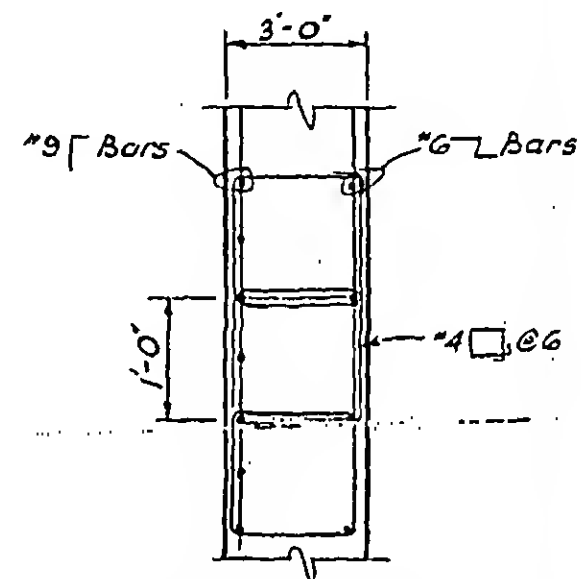
SECTION AT EL. 264'-0"

DATE 2-25-70

## REVISIONS



SECTION L-L  
(1/4" = 1'-0")



Section a-a



DESIGNED  
D. Liu

DRAWN  
*D. Huggins*

REVIEWED  
E.L.

8-JK7-8.6

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

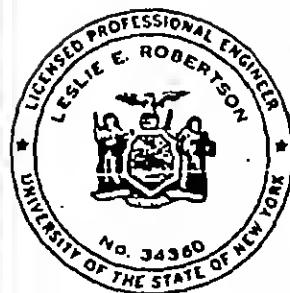
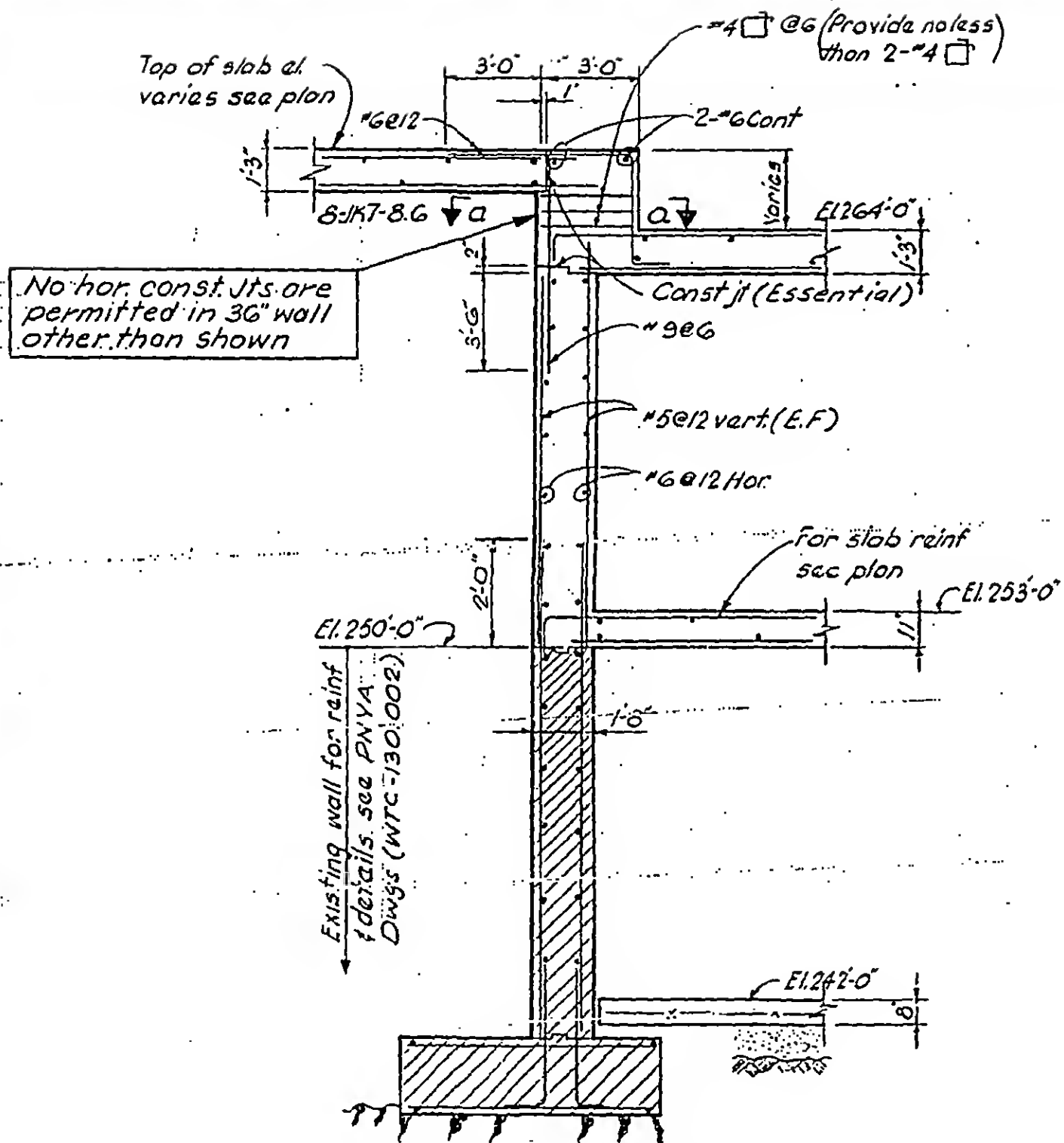
PROJECT THE WORLD TRADE CENTER

TITLE

SECTION AT EL. 264'-0"

DATE 2-25-70

REVISIONS

DESIGNED  
D. LiuDRAWN  
D. HugginsREVIEWED  
E. L.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

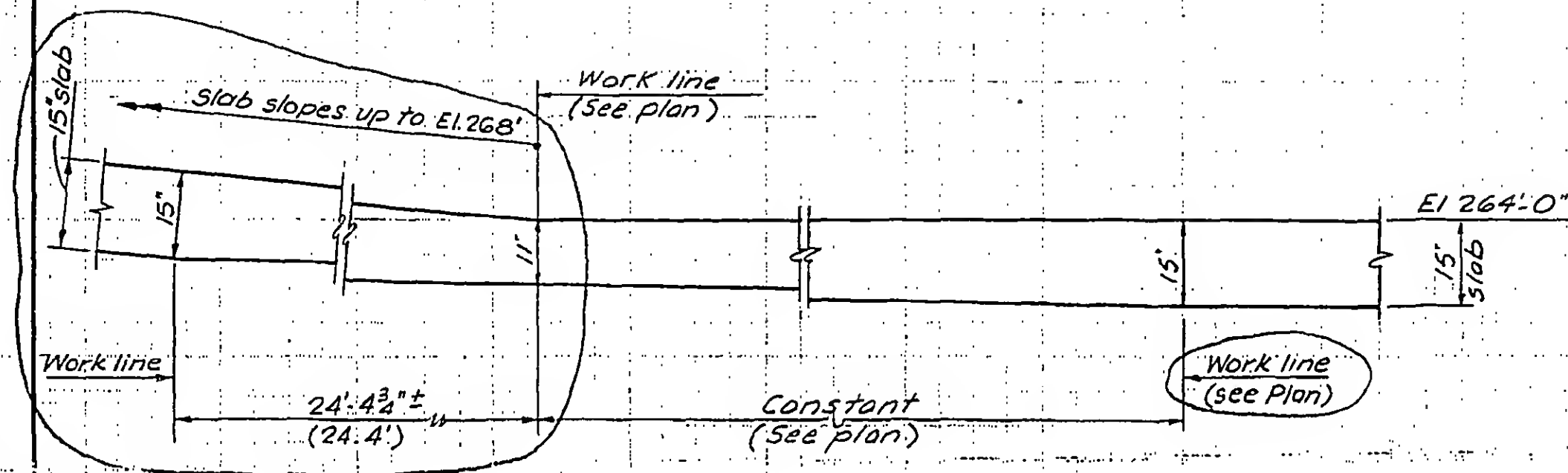
PROJECT THE WORLD TRADE CENTER

TITLE SECTION AT ELEVATION 264

DATE 3-12-70

REVISIONS

4-8-70

SECTION N-N  
(1/2" = 1'-0")

DESIGNED

DRAWN  
A.F.REVIEWED  
E.L.

8-JK7-8.8

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

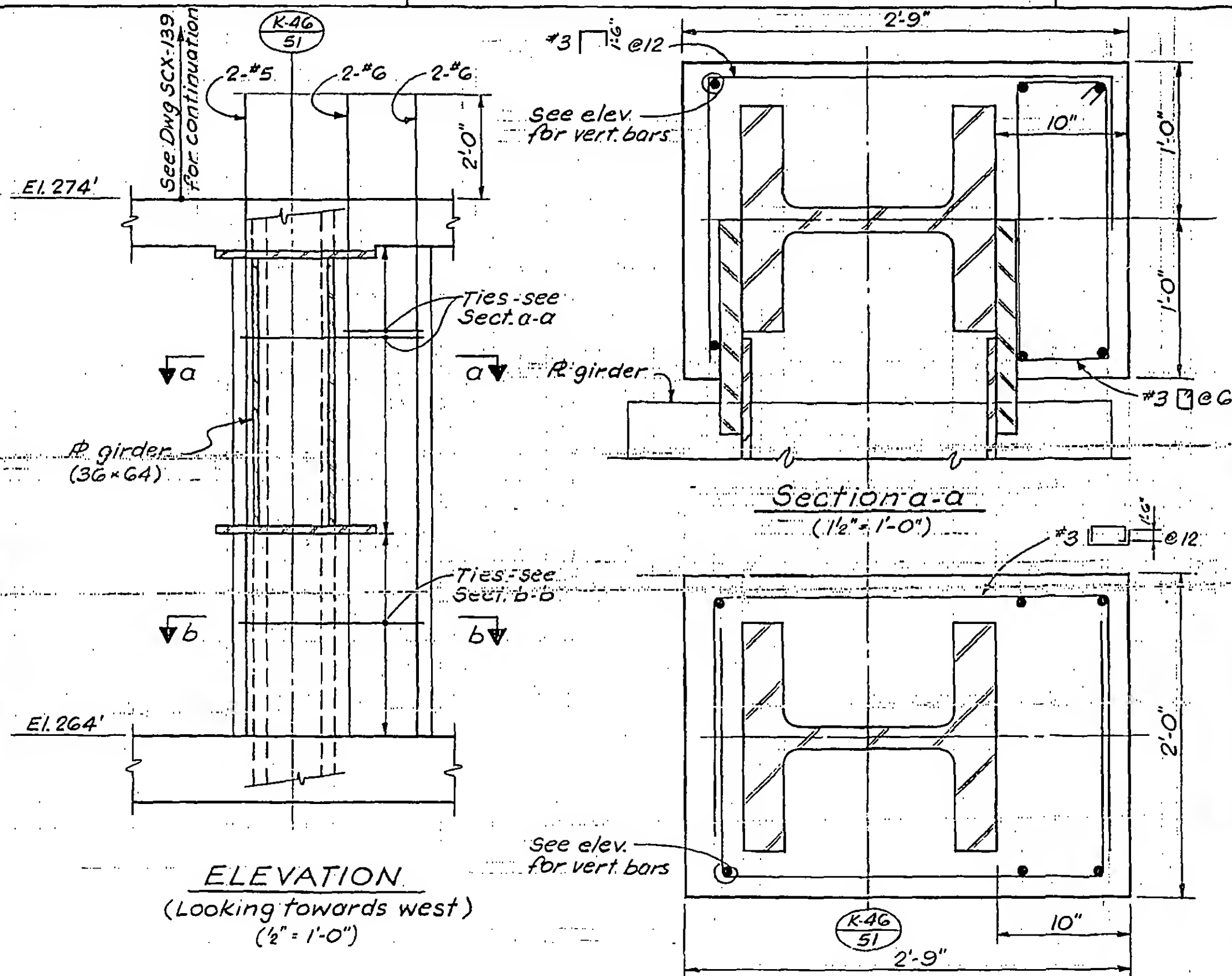
Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE SECTIONS AT ELEVATION 264'

DATE 3-20-70

REVISIONS



DESIGNED

DRAWN  
S.C.CHECKED  
T.O.

8-JK7-8.9

## Structural & Civil Engineers

DATE 4-29-69

Future 6" conc. wall (N.I.C.)

Provide #4 @ 18 dwls. (except at door)

9-29-69

10-8-69

3-31-70

- Future 6" conc wall (N.I.C.)  
- Provide 14 @ 18 dwls

EL 310-0\*

1-75 (Typ.)  
(All 4-sides)

#4@12  
Butt. reinf.  
against bot.  
of WF

1-#6

$$2^{\circ} 6' 11''$$

E/304-O

(E) 305-6

840"

#4012

El 305' 7"

Notes :

1. Concrete to be 3000 psi (normal WT) except slab at el. 310'-0"

— १७८ —

2. See approved elevator shop drawings for location, shape, and size of inserts in walls.

- For details - See Arch. dwgs.

El. 294'-0"

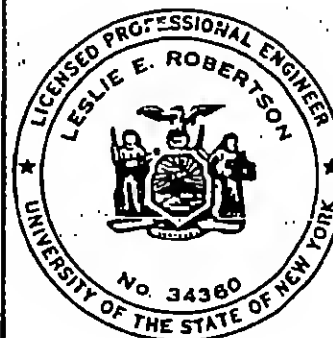
\*5x3'-0" @ 12"  
thru holes  
provided in  
beam web

EL 288'-0"

6" walls between el. 288'-0" and el. 310'-0" are acting as hangers to support slab at el. 294'-0". Therefore all shorings under 6" walls shall not be removed until completion.

Section A-A

8-JK7-107



RESIGNED

DRAWN  
50

REVIEWE

• E.L

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

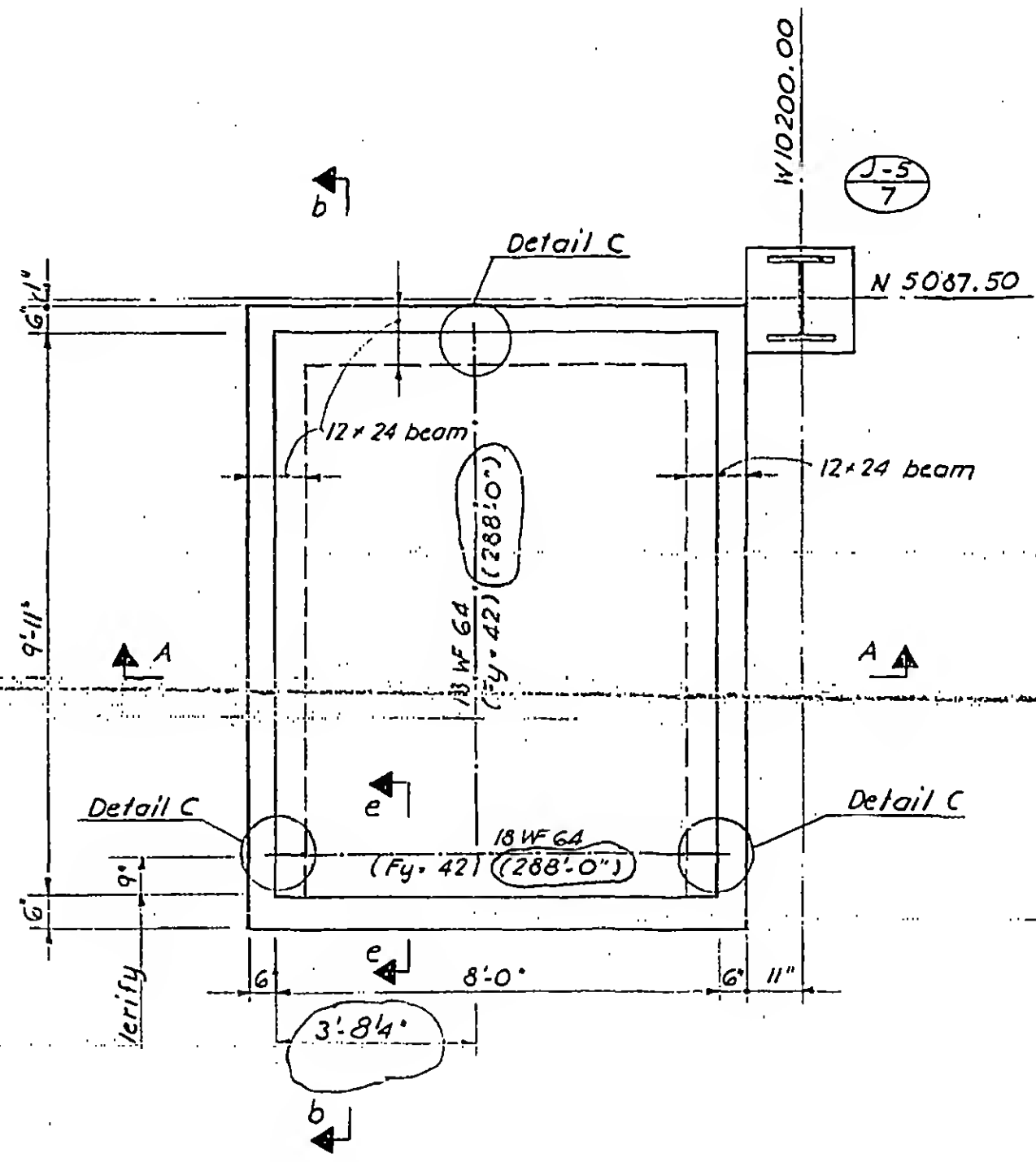
Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

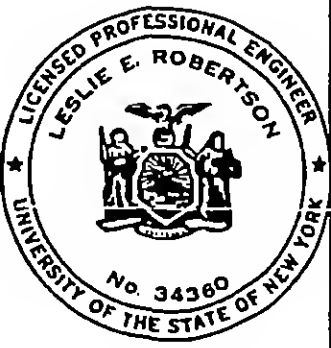
TITLE ELEVATOR C9, SECTIONS

DATE 4-29-69

REVISIONS
9-29-69
10-8-69



Section a-a  
(Plan at El 288' 0'')



DESIGNED
DRAWN F. Smith
REVIEWED E.L.



## Structural & Civil Engineers

PROJECT	THE WORLD TRADE CENTER	TITLE	ELEVATOR C9- SECTIONS
---------	------------------------	-------	-----------------------

DATE 4-29-69

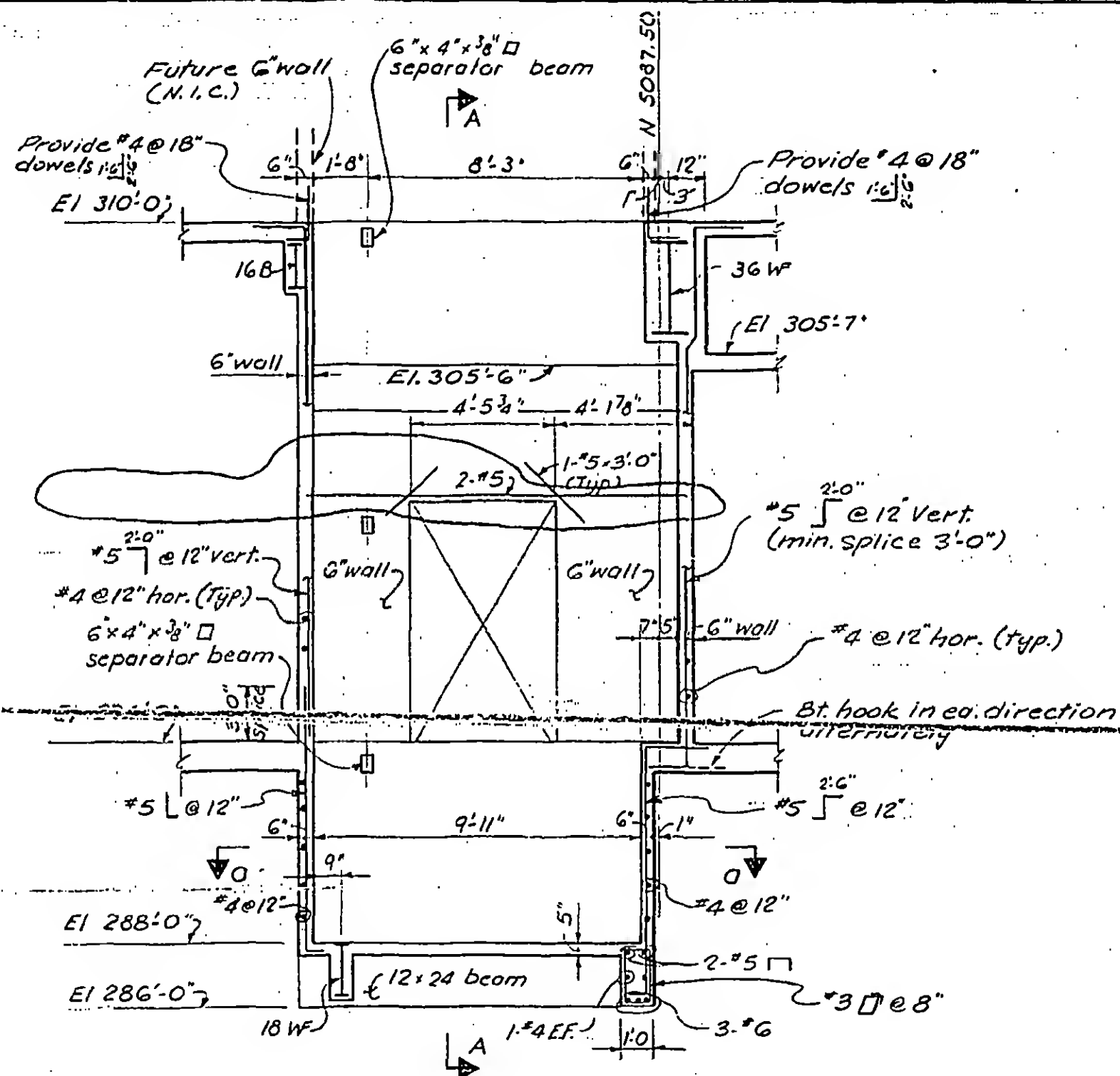
## REVISIONS

5-26-69

9-29-69

10-8-69

3-31-70



Section b-b.



**DESIGNED**

**DRAWN**

DRANK  
F. Smith

REVIEWED

E.L.

$$B-JK7=10.3$$

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER TITLE ELEVATOR C9 - SECTIONS

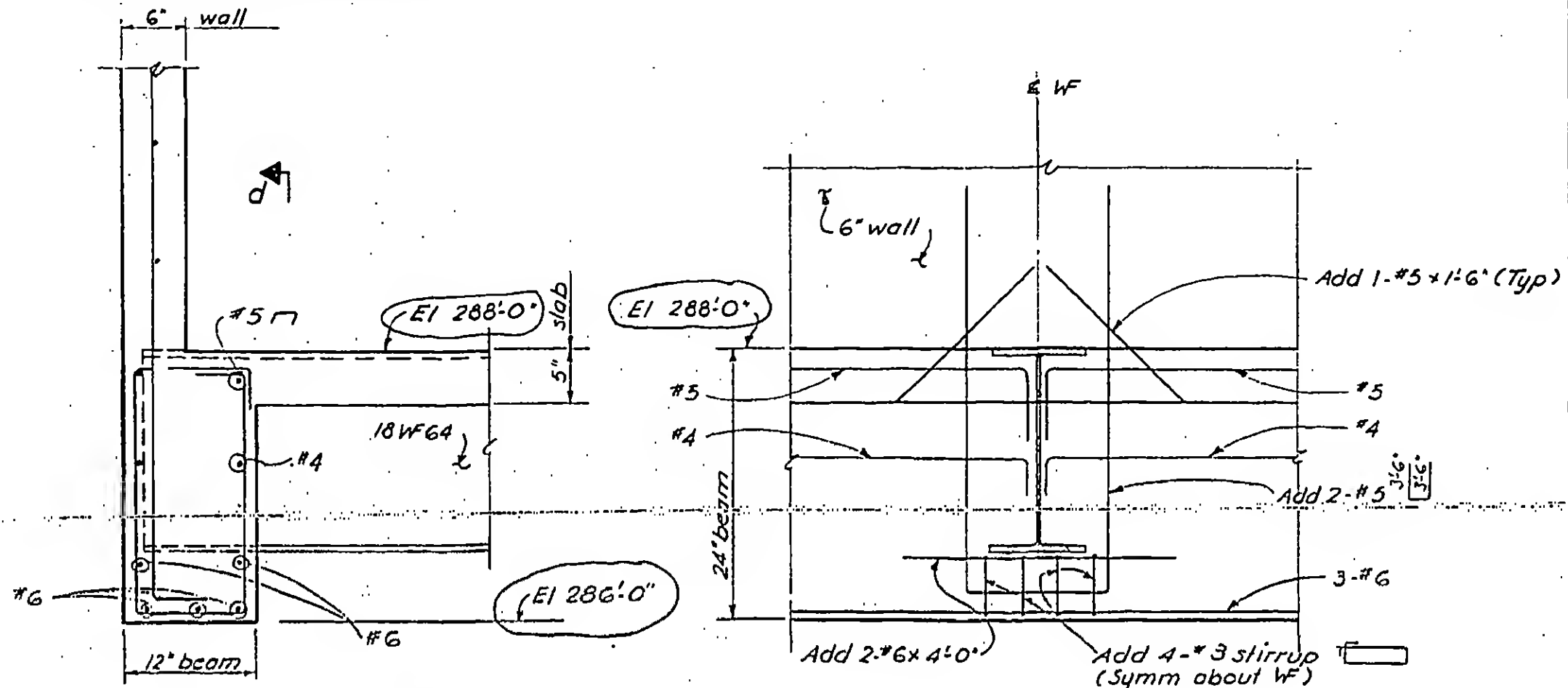
DATE 4-29-69

## REVISIONS

5-26-69

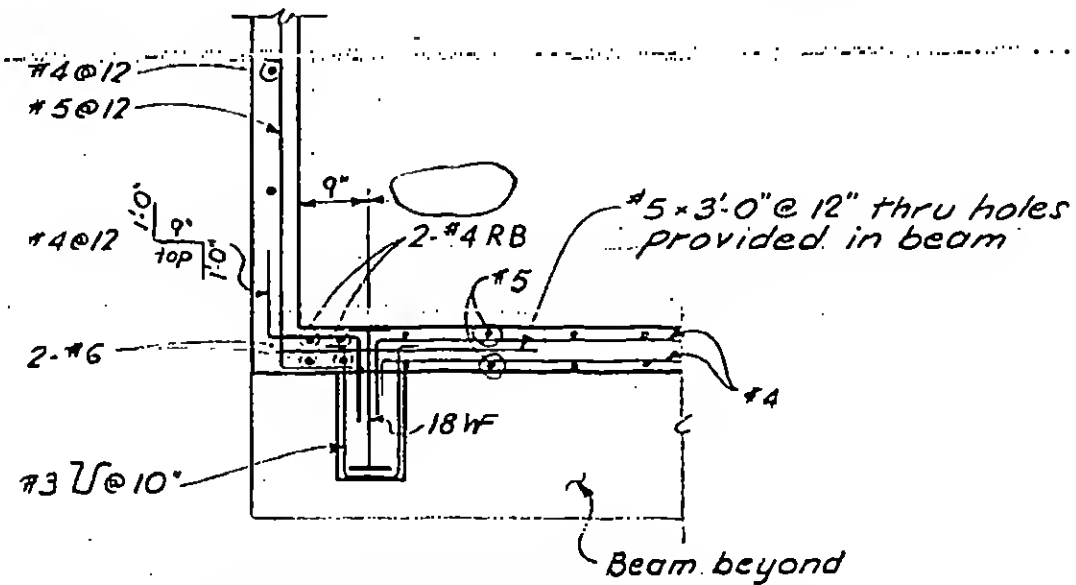
9-29-69

10-8-69

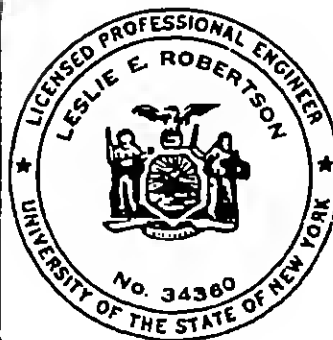


Section d-d

Detail C



Section e-e



DESIGNED

DRAWN F. Smith

REVIEWED

E.L.

8-JK-7-10.4

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE ELEVATOR C-10 SECTIONS

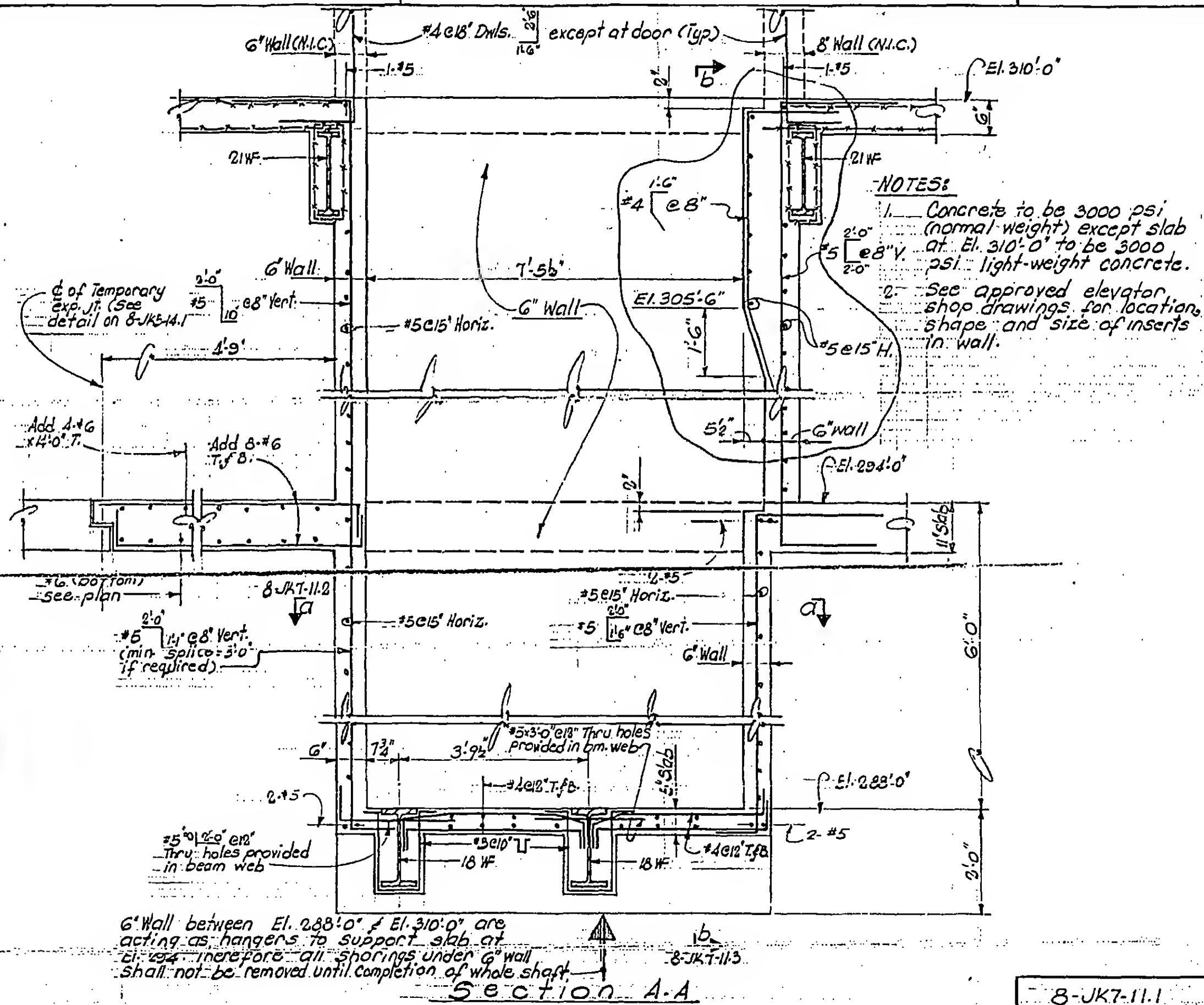
DATE 5-29-69

## REVISIONS

9-29-69

10-8-69

3-31-70



DESIGNED

DRAWN S.T.M.

REVIEWED

E.L.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON

Structural &amp; Civil Engineers

PROJECT THE WORLD TRADE CENTER

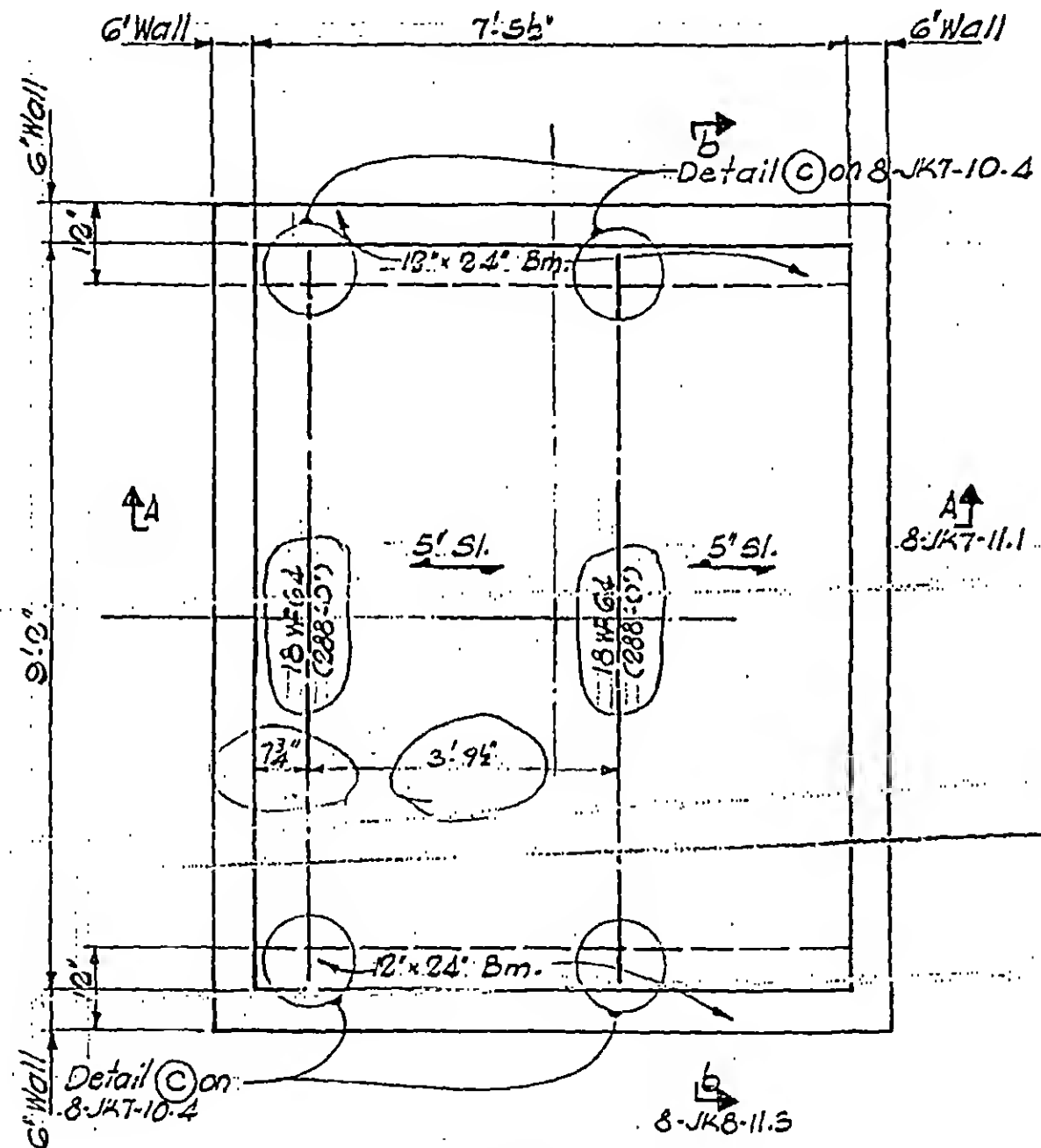
TITLE ELEVATOR C-10 SECTIONS

DATE 5-29-69

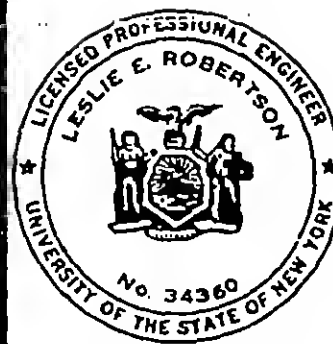
## REVISIONS

9-29-69

10-8-69



Section A-A  
(Plan)



DESIGNED

DRAWN  
S.T.M.REVIEWED  
E.L.

## Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER

TITLE	ELEVATOR C-10 SECTIONS
-------	------------------------

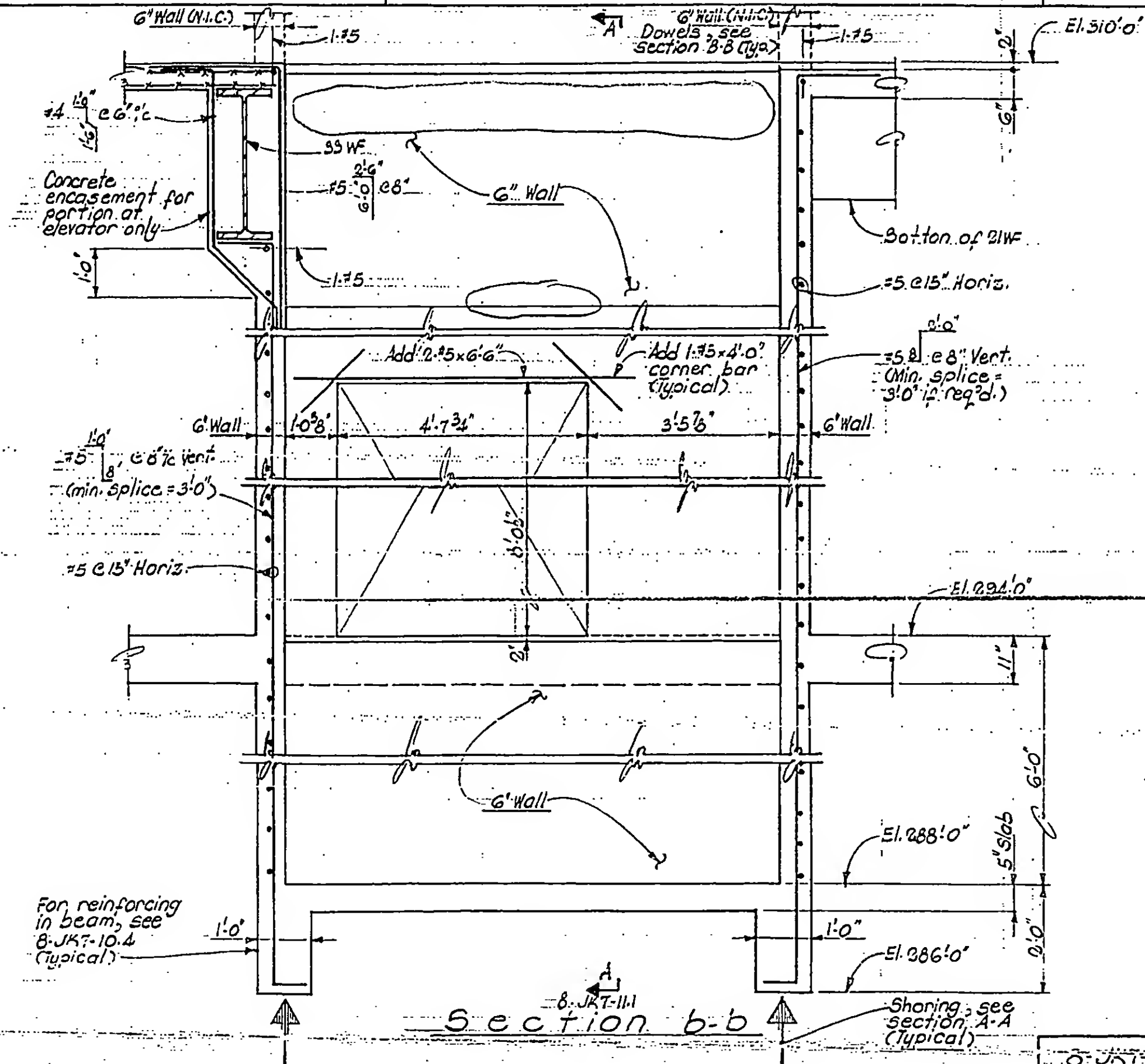
DATE 5-29-69

## REVISIONS

9-29-69.

10-8-69

3-31-70



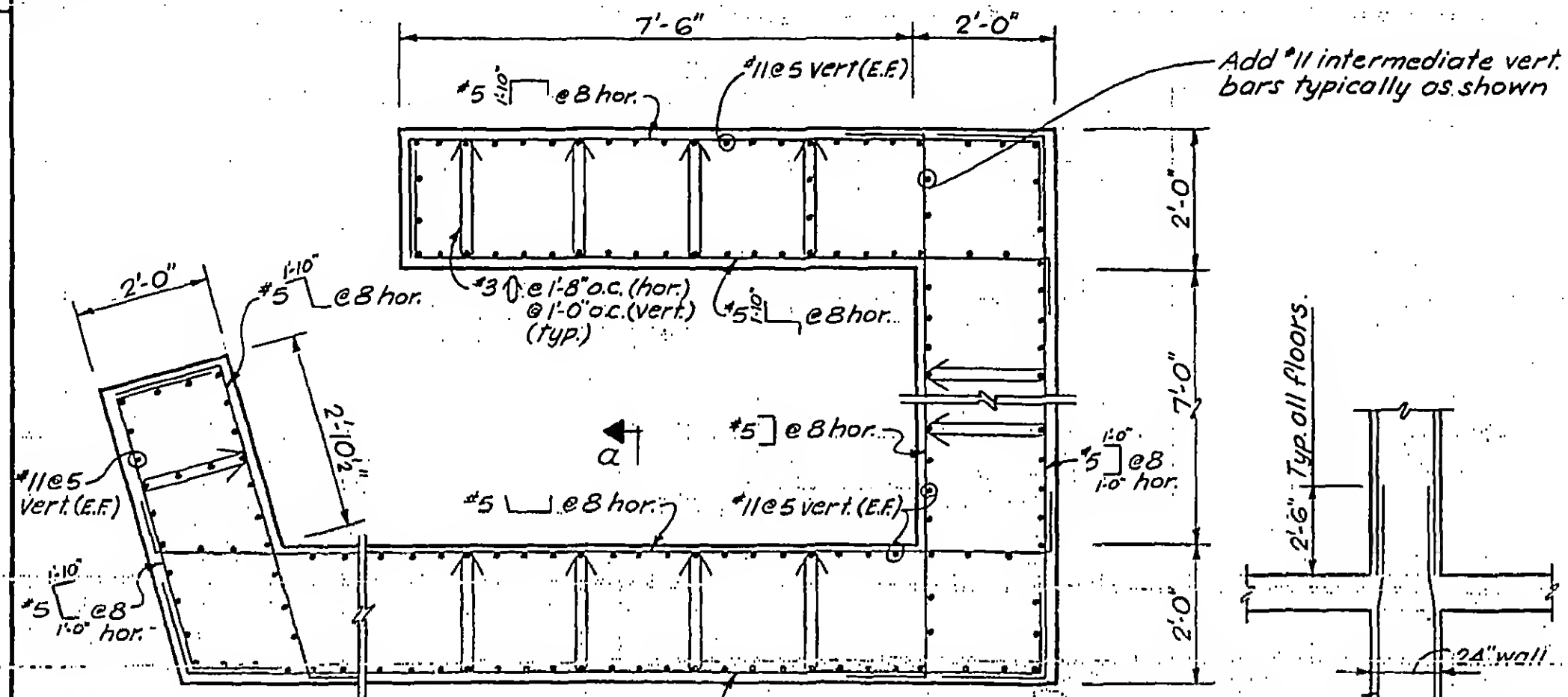
DESIGNED

DRAWN  
S.T.M.

REVIEWED  
E.L.

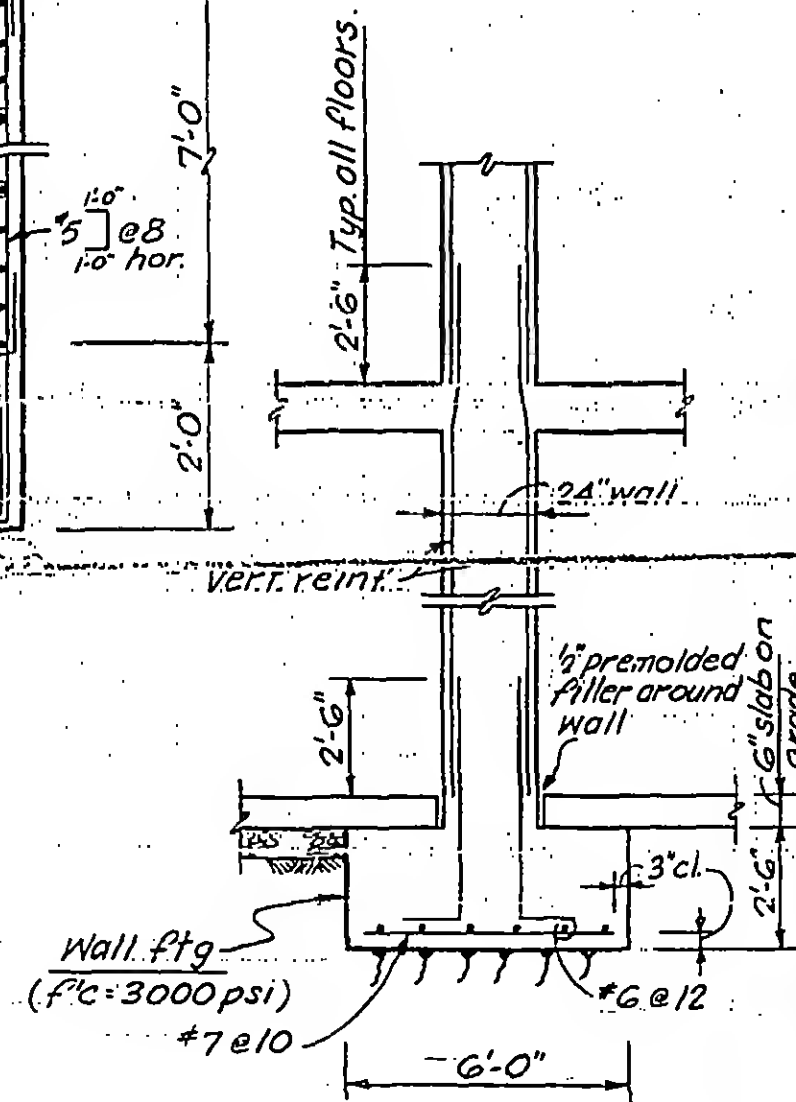
ॐ नमः शिवाय

## REVISIONS



Concrete strength: —  $f'_c = 4000 \text{ psi}$   
Ftg. up to El. 284

PLAN  
(1/2" = 1'-0")



Section a-a  
(1'4" = 1'-0")



DESIGNED

DRAWN  
S.C

REVIEWED  
EL

8-JK7-12.1

AD 3.9-2d 00-1576

WTU-1065-LEA